### THE O'TOOLE LAW FIRM

ATTORNEYS AT LAW

POST OFFICE BOX 352348

#### LOS ANGELES, CALIFORNIA 90035-0260

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> 333 SOUTH GRAND AVENUE 42ND FLOOR LO5 ANGELES, CALIFORNIA 90071

May 22, 2006

Ms. Kim Muratore, Case Developer (SFD-7-B) U.S. Environmental Protection Agency Region 9 75 Hawthorne Street San Francisco, CA 94105

Re: Response to CERCLA 104(e) Information Request NHOU – Part 1 of 2

Dear Ms. Muratore:

This firm represents several family trusts that jointly own the real property parcel located at 11310 Sherman Way, Sun Valley, California 91352, as follows: The Wagner Residual "A" Trust, The Wagner Residual "B" Trust and The Wagner Marital Trust (hereafter "the Wagner Trusts"), and the Basinger Trust B (the Exemption Trust) and the Basinger Trust C (the Marital Trust) (hereafter "the Basinger Trusts").

On April 11, 2006, Elizabeth Adams of U.S. EPA – Region 9 sent separate information requests to Linda Wagner Lipscomb, as trustee of the Wagner Trusts and to Viola M. Basinger, as trustee of the Basinger Trusts. The information requests were issued pursuant to Section 104(e) of the federal Comprehensive Environmental Response, Compensation and Liability Act (the "Requests"), and set a response deadline of 30 days following receipt of the Requests by the trustees of the Basinger Trusts and the Wagner Trusts (hereafter referred to collectively as "the BW Trusts"). Both Requests were received on April 17, 2006.

By agreement with Michael Massey, Esq., the deadline for delivery of the initial portion of the BW Trusts' responses to the Requests was extended until Tuesday, May 23, 2006. Under that agreement, the BW Trusts were to submit a combined response ("BW Trusts' Response") in two parts, with the second part to be submitted in mid-June 2006. Each of the Requests varied slightly in the number of individual items, but covered

the same basic information. The initial portion of the BW Trusts' Response, which is enclosed herewith, includes responses to the following items in each Request:

Request # 1, 2a, 3a, 2b, 3b, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38 and 39 to the Basinger Trusts.

Request # 1, 2a, 3a, 2b, 3b, 5, 6, 7, 8, 9, 10, 11, 12, 13, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28 and 29 to the Wagner Trusts.

The deadline for submittal of the remaining, second portion of the BW Trusts' Response is Friday, June 16, 2006.

It should be noted that Gordon and Peggy Wagner are both deceased. Ms. Lipscomb's tenure as trustee of the Wagner Trusts commenced only a few months ago, upon the death of the previous trustee, Peggy Wagner. Joseph Basinger is also deceased. Viola Basinger is incapacitated, and her son, Mr. Don Basinger, holds her power of attorney for matters concerning the Basinger trusts.

In preparing the BW Trusts' Response, all available and relevant documents and records in the possession, custody and control of the trustees were reviewed. However, because the BW Trusts are passive landowners and the real property has been operated by various tenants during the BW Trusts' ownership, there are likely other responsive documents that are not in the possession, custody or control of the trustees, but which may be submitted by the current tenant, Hawker Pacific Aerospace, in response to the CERCLA 104(e) information request issued concurrently by U.S. EPA – Region 9 to Hawker Pacific Aerospace. Should the trustees discover any additional, non-privileged documents or records that are responsive to the Requests, we will forward them to you promptly.

In submitting this response, the BW Trusts are not withholding any responsive documents or other records based on any claim of legal privilege. However, this response does not include any records of communications or transmittals of information to or from this firm, which may have occurred in the course of preparing the BW Trusts' Response to the Requests.

All future correspondence regarding the Requests and any other portion of the April 11, 2006 "general notice" letters to the trustees of the BW Trusts should be directed to me. My telephone number is (213) 630-4200 or 4220, and the fax number is (213) 683-1148. My e-mail address is otoolelaw@earthlink.net. My address for all U.S. mail is The O'Toole Law Firm, P.O. Box 352348, Los Angeles, CA 90035-0260. My street address, for courier packages only, is The O'Toole Law Firm, 333 S. Grand Avenue, Los Angeles, CA 90071.

Ms. Kim Muratore, Case Developer (SFD-7-B) U.S. Environmental Protection Agency May 22, 2006 Page 3

### THE O'TOOLE LAW FIRM

Once you have had an opportunity to review the BW Trusts' initial response to the Requests, please call me to discuss any questions you may have.

Very truly yours,

Patricia M. O'Toole

## Enclosures

cc:

Ms. Linda Wagner Lipscomb

Mr. Don Basinger, Attorney-in-Fact for Ms. Viola Basinger

*		

BW TRUSTS' MAY 22, 2006 RESPONSE TO CERCLA 104(e) INFORMATION REQUEST – NHOU

**VOLUME 1 OF 4** 



# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION IX

75 Hawthorne Street San Francisco, CA 94105

RETURN RECEIPT REQUESTED
Certified Mail #: 7005 3110 0002 8246 8988

APR 11 2006

Viola M. Basinger, Trustee JW & VM Basinger Trust PT c/o Don Basinger

# FX-6 Personal Privacy

Re: General Notice Letter/104(e) for the San Fernando Valley/North Hollywood Superfund Site
North Hollywood, California

Dear Ms. Basinger:

Under the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA"), commonly known as the federal "Superfund" law, the U.S. Environmental Protection Agency ("EPA") is responsible for responding to the release or threat of release of hazardous substances and pollutants or contaminants into the environment—that is, for stopping further contamination from occurring and for cleaning up or otherwise addressing any contamination that has already occurred. EPA has documented that hazardous substances and pollutants or contaminants were released at the San Fernando Valley Area 1 site, North Hollywood Operable Unit ("NHOU" or "the Site"), located in Los Angeles County, California. EPA has spent public funds to investigate and control releases of hazardous substances or potential releases of hazardous substances at the Site. EPA has determined that the JW & VM Basinger Trust PT ("the Trust") may be responsible under Superfund for cleanup of the Site or costs EPA has incurred in cleaning up the Site.

### **Explanation of Potential Liability**

Under CERCLA, specifically Sections 106(a) and 107(a), potentially responsible parties ("PRPs") may be required to perform cleanup actions to protect the public health, welfare, or the environment. PRPs may also be responsible for costs incurred by EPA in cleaning up the Site. PRPs include current owners or operators of a site, former owners or operators during disposal, as well as persons who arranged for treatment and/or disposal of any hazardous substances found at the site and persons who accepted hazardous substances for transport and selected the site to which the hazardous substances were delivered.

Based on the information collected, EPA believes that the Trust may be liable for contamination of soils and groundwater at the Site under Section 107(a) of CERCLA. Liability is based on the Trust's status as a current owner of real property within the Site, from which contaminants, including but not limited to trichloroethylene ("TCE") and tetrachloroethylene ("PCE"), were released into the environment.

To date, EPA has taken several response actions at the Site under the authority of CERCLA. In 1989, EPA issued an Interim Record of Decision ("ROD") in which EPA selected an interim remedy for the Site. The interim remedy, which was expected to last fifteen years, required the extraction and treatment of PCE and TCE from groundwater and delivery of the treated groundwater to the City of Los Angeles's public drinking water system. Since 1989, EPA has funded the operation and maintenance ("O&M") of the interim remedy. Initially, EPA funded the O&M using Superfund money. Subsequently, EPA entered into two consent decrees with PRPs at the Site, including one to which Joseph Basinger, as an individual, was a signatory. EPA has used the funds recovered in those settlements to fund the O&M of the interim remedy. At this time, the EPA is considering selecting further remedial actions at the Site.

EPA will incur further costs to evaluate, select, and implement further response actions at the Site. This general notice letter provides you with advance notice that EPA may seek to recover its costs from the Trust for such response actions, and/or may ask the Trust to perform work at the Site.

# Financial Concerns/Ability to Pay Settlements

EPA is aware that the financial ability of some PRPs to contribute toward the payment of response costs at the Site may be substantially limited. If you believe, and can document, that the Trust falls within that category, please contact Kim Muratore of EPA at 75 Hawthorne Street, San Francisco, CA, 94105, (415) 972-3121, <a href="muratore.kim@epa.gov">muratore.kim@epa.gov</a>, for information on "Ability-to-Pay Settlements." If you make a limited-ability-to-pay claim on behalf of the Trust, you will receive a letter requesting certain financial information from the Trust such as tax returns, financial statements, etc., that EPA will use to conduct its analysis. If EPA concludes that the Trust has a legitimate inability to pay the full amount of EPA's costs, EPA may offer a schedule for payment over time or a reduction in the total amount demanded from the Trust.

### **Information to Assist the Trust**

EPA would like to encourage communication between the Trust, other PRPs, and EPA. EPA typically recommends that all PRPs meet to select a "steering committee" that will be responsible for representing the group's interests. Establishing a manageable group is critical to successful negotiations with EPA. If this is not possible, EPA encourages each PRP to select one person from its company or organization to represent its interests to EPA. To assist the Trust in its efforts to communicate, we have enclosed a list of names and addresses of PRPs to whom this letter, or a very similar letter, is being sent. (Enclosure A)

EPA will establish an Administrative Record that contains documents that serve as the basis for EPA's selection of further cleanup actions for the Site. The Administrative Record for the 1989 ROD is located at the Los Angeles Department of Water and Power Library, 111 North Hope Street, Room 516, Los Angeles, CA, phone (213) 367-1995, and is available to the Trust and the public for inspection. The Administrative Record is also available for inspection at the Superfund Records Center, EPA Region 9, 95 Hawthorne Street, 4<sup>th</sup> floor, San Francisco, CA 94105. As EPA moves forward with selection of further response actions for the Site, EPA will supplement the Administrative Record. EPA also may issue advance notice of the proposed action(s) for public comment.

## Resources and Information for Small Businesses

As you may be aware, on January 11, 2002, President Bush signed into law the Superfund Small Business Liability Relief and Brownfields Revitalization Act. This Act contains several exemptions and defenses to CERCLA liability, that we suggest all parties evaluate. You may obtain a copy of the law via the Internet at <a href="http://www.epa.gov/swerosps/bf/sblrbra.htm">http://www.epa.gov/swerosps/bf/sblrbra.htm</a> and review EPA guidances regarding these exemptions at <a href="http://www.epa.gov/compliance/resources/policies/cleanup/superfund">http://www.epa.gov/compliance/resources/policies/cleanup/superfund</a>.

In addition, if you are a "service station dealer" who accepts used oil for recycling, you may qualify for an exemption from liability under Section 114(e) of CERCLA. EPA guidance regarding this exemption can be found on the Internet at <a href="http://www.epa.gov/compliance/resources/policies/cleanup/superfund">http://www.epa.gov/compliance/resources/policies/cleanup/superfund</a>. If you believe you may qualify for the exemption, please contact Assistant Regional Counsel Michael Massey at 75 Hawthorne Street, San Francisco, CA, 94105, 415-972-3034, or e-mail him at <a href="massey-Michael@epa.gov">Massey-Michael@epa.gov</a>, to request an application/information request specifically designed for service station dealers.

EPA has created a number of helpful resources for small business. EPA has established the National Compliance Assistance Clearinghouse as well as Compliance Assistance Centers which offer various forms of resources to small businesses. You may inquire about these resources at <a href="https://www.epa.gov">www.epa.gov</a>. In addition, the EPA Small Business Ombudsman may be contacted at <a href="https://www.epa.gov/sbo">www.epa.gov/sbo</a>. Finally, EPA developed a fact sheet about the Small Business Regulatory Enforcement Fairness Act ("SBREFA"), which is enclosed with this letter. (Enclosure B)

### **CERCLA 104(e) Information Request**

EPA believes that the Trust may have information which could assist the California Regional Water Quality Control Board ("RWQCB") and EPA in their investigation of the groundwater at the Site, especially with regard to TCE, PCE, and chromium, and requests that the Trust answer the questions contained in Enclosure D. Definitions and instructions on how to respond to the questions are provided in Enclosure C.

Under Section 104(e) of CERCLA, 42 U.S.C. §9604(e), EPA has broad information gathering authority which allows EPA to require persons to furnish information or documents relating to:

- (A) The identification, nature, and quantity of materials which have been or are generated, treated, stored, or disposed of at a vessel or facility or transported to a vessel or facility.
- (B) The nature or extent of a release or threatened release of a hazardous substance or pollutant or contaminant at or from a vessel or facility.
- (C) Information relating to the ability of a person to pay for or perform a cleanup.

Please note that the Trust's compliance with this information request is mandatory. Failure to respond fully and truthfully may result in an enforcement action by EPA pursuant to Section 104(e)(5) of CERCLA, 42 U.S.C. §9604(e)(5). This statutory provision authorizes EPA to seek the imposition of penalties of up to \$32,500 per day of noncompliance. Please be further advised that provision of false, fictitious, or fraudulent statements or representations may subject you to criminal penalties under 18 U.S.C. §1001. The information the Trust provides may be used by EPA in administrative, civil, or criminal proceedings.

Some of the information EPA is requesting may be considered by the Trust to be confidential. Please be aware that the Trust may not withhold the information upon that basis. If the Trust wishes EPA to treat the information confidentially, it must advise EPA of that fact by following the procedures outlined in Enclosure C, including the requirement for supporting its claim for confidentiality.

This request for information is not subject to review by the Office of Management and Budget ("OMB") under the Paperwork Reduction Act because it is not an "information collection request" within the meaning of 44 U.S.C. §§3502(3), 3507, 3512, and 3518(c)(1). See also, 5 C.F.R. §§1320.3(c), 1320.4, and 1320.6(a).

We encourage the Trust to give this matter immediate attention and request that it provide a complete and truthful response to this information request within thirty (30) calendar days of its receipt of this letter. EPA is committed to moving forward with its investigation and extensions of time for responses will only be granted upon a showing of good cause. If the Trust anticipates that it will need an extension, please request one as soon as possible. Requests for extensions made at or near the due date will not be viewed favorably by EPA. The Trust's response to this letter should be made in writing and signed by you or another duly authorized representative of the Trust. If some or all of the requested information has previously been provided to EPA, the Trust may incorporate that information by referencing the date of the earlier response and the information contained therein that is responsive to the current information request.

The Trust's response should include the appropriate name, address, and telephone number of the person to whom EPA should direct future correspondence in regard to this information request. The Trust's response to the information request should be directed to:

Kim Muratore, Case Developer (SFD-7-B) U.S. EPA, Region 9 75 Hawthorne St. San Francisco, CA 94105

Please also provide the appropriate name, address, and telephone number of the person to whom EPA should direct future correspondence with regard to the general notice portion of this letter. If the Trust has any questions regarding this letter or the Site's cleanup status, please contact the Remedial Project Manager, Rachel Loftin at (415) 972-3253, <a href="loftin.rachel@epa.gov">loftin.rachel@epa.gov</a>. Questions regarding settlement or legal matters can be directed to Michael Massey at 415-972-3034 or e-mail at <a href="massey.Michael@epa.gov">Massey.Michael@epa.gov</a>. Thank you for your prompt attention to this matter.

Sincerely,

Elizabeth Adams, Chie

Site Cleanup Branch Superfund Division

Enclosures (4)

cc: Patricia M. O'Toole, Esq. The O'Toole Law Firm P.O. Box 352348 Los Angeles, CA 90035-0260

# **ENCLOSURE D: INFORMATION REQUEST**

- 1. State the full legal name, address, telephone number, position(s) held by, and tenure of the individual(s) answering any of the questions below on behalf of the JW & VM Basinger Trust PT ("the Trust").
- 2. Information obtained by EPA indicates that the Trust co-owns or co-owned together with the Wagner Trust the real property at 11310 Sherman Way, Sun Valley, California (the "Facility" or the "Hawker Pacific Facility"). EPA's information also indicates that the Facility was previously co-owned by the JW & VM Basinger PT ("Basinger PT") and the Wagner Trust, and before that by Joseph & Viola Basinger and Gordon & Peggy Wagner, as individuals. Henceforth, the term "Facility" shall be interpreted to include both the real property at 11310 Sherman Way, Sun Valley, California, and any improvements thereto. Provide the following information with respect to the Trust's ownership of the Facility:
  - a. The dates the Trust owned the Facility;
  - b. The parcel number(s) and corresponding street address(es) for the Facility;
  - c. A copy of each document evidencing the purchase, ownership, and sale of the Facility;
  - d. The current or last known address and phone number of any and all other current and previous owners of the Facility;
  - e. A copy of each lease, rental agreement, or any other document between the Trust and any business that operated at the Facility for all periods of time that the Trust owned the Facility; and
  - f. Each type of business, commercial, or industrial operation conducted at the Facility, and the name of each operator and the dates that each was operating.
- 3. Provide the following information with respect to the Basinger PT's ownership of the Facility:
  - a. The dates the Basinger PT owned the Facility;
  - b. The parcel number(s) and corresponding street address(es) for the Facility;
  - c. A copy of each document evidencing the purchase, ownership, and sale of the Facility;
  - d. The current or last known address and phone number of any and all other current and previous owners of the Facility;
  - e. A copy of each lease, rental agreement, or any other document between the Basinger PT and any business that operated at the Facility for all periods of time that the Basinger PT owned the Facility; and
  - f. Each type of business, commercial, or industrial operation conducted at the Facility, and the name of each operator and the dates that each was operating.
- 4. Provide the following information with respect to Viola and Joseph Basinger's ("the Basingers as Individuals") ownership of the Facility:
  - a. The dates the Basingers as Individuals owned the Facility;
  - b. The parcel number(s) and corresponding street address(es) for the Facility;

- c. A copy of each document evidencing the purchase, ownership, and sale of the Facility;
- d. The current or last known address and phone number of any and all other current and previous owners of the Facility;
- e. A copy of each lease, rental agreement, or any other document between the Basingers as Individuals and any business that operated at the Facility for all periods of time that the Basingers as Individuals owned the Facility; and
- f. Each type of business, commercial, or industrial operation conducted at the Facility, and the name of each operator and the dates that each was operating.

# 5. With regard to the Trust:

- a. Provide a complete copy of the document(s) establishing the Trust;
- b. Provide a complete copy of any amendments or updates to the Trust documents;
- c. Provide a complete listing of current trust assets for the Trust and indicate the current market value of each Trust asset as well as the dollar value of any liabilities of the Trust; and
- d. Provide a complete, signed copy of the last Federal and State income tax returns filed for the Trust, including any schedules, footnotes, or attachments.
- e. Identify all current trustees of the Trust, and provide their full names, current addresses, telephone numbers, and dates that each has acted as trustee.

# 6. With regard to the Basinger PT:

- a. Provide a complete copy of the document(s) establishing this entity and describe its corporate structure (e.g., trust, partnership, sole proprietorship, joint venture, etc.);
- b. Provide a complete copy of any amendments or updates to the documents establishing this entity;
- c. Provide a complete listing of current entity assets and liabilities and state the current market value of each asset and liability; and
- d. Provide a complete, signed copy of the last Federal and State income tax returns filed for this entity, including any schedules, footnotes, or attachments.
- e. Identify all current trustees (if applicable) of this entity, and provide their full names, current addresses, telephone numbers, and dates that each has acted as trustee.
- 7. Identify the individuals who are or were responsible for environmental matters at the Facility both during and before the Trust's ownership of the Facility. For each individual responsible for environmental matters, provide their full names and the company they worked for, their current or last known addresses, telephone numbers, position titles, and the dates each individual held such position.
- 8. Identify the individuals who are or were responsible for environmental matters at the Facility both during and before the Basinger PT's ownership of the Facility. For each individual responsible for environmental matters, provide their full names and the company they worked for, their current or last known addresses, telephone numbers, position titles, and the dates each individual held such position.
- 9. Identify the individuals who are or were responsible for environmental matters at the Facility

both during and before the Basingers as Individuals' ownership of the Facility. For each individual responsible for environmental matters, provide their full names and the company they worked for, their current or last known addresses, telephone numbers, position titles, and the dates each individual held such position.

- 10. Provide a scaled map of the Facility which includes the locations of significant buildings and features. Indicate the locations of any maintenance shops, machine shops, degreasers, liquid waste tanks, chemical storage tanks, and fuel tanks. Provide a physical description of the Facility and identify the following:
  - a. Surface structures (e.g., buildings, tanks, containment and/or storage areas, etc.)
  - b. Subsurface structures (e.g., underground tanks, sumps, pits, clarifiers, etc.);
  - c. Groundwater and dry wells, including drilling logs, date(s) of construction or completion, details of construction, uses of the well(s), date(s) the well(s) was/were abandoned, depth to groundwater, depth of well(s) and depth to and of screened interval(s);
  - d. Past and present stormwater drainage system and sanitary sewer system, including septic tank(s) and subsurface disposal field(s);
  - e. Any and all additions, demolitions or changes of any kind to physical structures on, under or about the Facility or to the property itself (e.g., excavation work), and state the date(s) on which such changes occurred; and
  - f. The location of all waste storage or waste accumulation areas as well as waste disposal areas, including but not limited to dumps, leach fields, and burn pits.
- 11. Provide copies of hazardous material business plans and chemical inventory forms (originals and updates) submitted to city, county, and state agencies.
- 12. Provide a list of all chemicals and hazardous substances used at the Facility during any portion of time that the Trust owned the Facility, identifying the chemical composition and quantities used. Provide copies of Material Safety Data Sheets for all hazardous substances used.
- 13. Provide a list of all chemicals and hazardous substances used at the Facility during any portion of time that the Basinger PT owned the Facility, identifying the chemical composition and quantities used. Provide copies of Material Safety Data Sheets for all hazardous substances used
- 14. Provide a list of all chemicals and hazardous substances used at the Facility during any portion of time that the Basingers as Individuals owned the Facility, identifying the chemical composition and quantities used. Provide copies of Material Safety Data Sheets for all hazardous substances used
- 15. Identify and provide the information below for all volatile organic compounds (most notably PCE; TCE; 1,1-DCE; MTBE; ,14-DCA, cis-1,2-DCE; and carbon tetrachloride); Title 22 metals including total and hexavalent chromium; 1,4-dioxane; N-nitrosodymethylamine

(NDMA); perchlorate; which are or were used at, or transported to, the Facility:

- a. The trade or brand name, chemical composition, quantity used for each chemical or hazardous substance and the Material Safety Data Sheet for each product;
- b. The location(s) where each chemical or hazardous substance is or was used, stored, and disposed of;
- c. The kinds of wastes (e.g., scrap metal, construction debris, motor oil, solvents, waste water), the quantities of wastes, and the methods of disposal for each chemical, waste, or hazardous substance;
- d. The quantity purchased (in gallons), the time period during which it was used, and the identity of all persons who used it; and
- e. The supplier(s), and provide copies of all contracts, service orders, shipping manifests, invoices, receipts, canceled checks, or any other documents pertaining to the supply of chemicals or hazardous substances.
- 16. Documentation provided to EPA shows that in 2005, an investigation was conducted at the behest of the JW & VM Basinger Trust PT, along with the Wagner Trust and Hawker Pacific Aerospace, to determine the presence and extent of chromium contamination in the soil at the Facility. Provide copies of all environmental data or technical or analytical information regarding soil, water, and air conditions at or adjacent to the Facility, including, but not limited to, environmental data or technical or analytical information related to soil contamination, soil sampling, soil gas sampling, geology, water (ground and surface), hydrogeology, groundwater sampling, and air quality.
- 17. Identify, and provide the following information for, all groundwater wells that are located at the Facility:
  - a. A map with the specific locations of the Facility groundwater wells;
  - b. Date the Facility groundwater wells were last sampled;
  - c. List of all constituents which were analyzed during groundwater sampling events; and
  - d. All groundwater sampling results, reports of findings, and analytical data.
- 18. Identify all insurance policies held by the Trust during all periods of time that the Trust owned the Facility. Provide the name and address of each insurer, the policy number, the amount of coverage and policy limits, the type of policy, and the expiration date of each policy. Include all comprehensive general liability policies and "first party" property insurance policies and all environmental impairment insurance. Provide a complete copy of each policy.
- 19. Identify all insurance policies held by the Basinger PT during all periods of time that the Basinger PT owned the Facility. Provide the name and address of each insurer, the policy number, the amount of coverage and policy limits, the type of policy, and the expiration date of each policy. Include all comprehensive general liability policies and "first party" property insurance policies and all environmental impairment insurance. Provide a complete copy of each policy.

- 20. Identify all insurance policies held by the Basingers as Individuals during all periods of time that the Basingers as Individuals owned the Facility. Provide the name and address of each insurer, the policy number, the amount of coverage and policy limits, the type of policy, and the expiration date of each policy. Include all comprehensive general liability policies and "first party" property insurance policies and all environmental impairment insurance. Provide a complete copy of each policy.
- 21. Provide copies of any applications for permits or permits received under any local, state, or federal environmental laws and regulations, including any waste discharge permits, such as national pollutant discharge elimination system permits.
- 22. Provide a list of employees for each business that operated at the Facility who had knowledge of the use of hazardous substances and/or had knowledge of the disposal of wastes. For each person identified, please provide their last known address and telephone number.
- 23. If the Trust is aware of any waste streams that were discharged to the sewer at the Facility, provide copies of any permits and analyses performed on the discharged wastes.
- 24. If the Basinger PT is aware of any waste streams that were discharged to the sewer at the Facility, provide copies of any permits and analyses performed on the discharged wastes.
- 25. If Viola Basinger is aware of any waste streams that were discharged to the sewer at the Facility, provide copies of any permits and analyses performed on the discharged wastes.
- For each waste stream generated at the Facility, describe the procedures for (a) collection, (b) storage, (c) treatment, (d) transport, and (e) disposal of the waste stream.
- 27. Please provide a detailed description of all pre-treatment procedures performed by the operators of the Facility prior to transport to a disposal site.
- 28. Please describe the method used by operators of the Facility to remove waste streams from sumps at the Facility.
- 29. Please identify all wastes that were stored at the Facility prior to shipment for disposal. Describe the storage procedures for each waste that was stored prior to disposal.
- 30. Please identify all leaks, spills, or other releases into the environment of any hazardous substances or pollutants or contaminants that have occurred at or from the Facility. In addition, identify and provide supporting documentation of:
  - a. The date each release occurred;
  - b. The cause of each release;
  - c. The amount of each hazardous substance, waste, or pollutant or contaminant released

- during each release;
- d. Where each release occurred and what areas were impacted by the release; and
- e. Any and all activities undertaken in response to each release, including the notification of any local, state, or federal government agencies about the release.
- 31. Provide copies of any correspondence between the Trust and local, state, or federal authorities concerning the use, handling, disposal, or remediation of hazardous substances at the Facility, including but not limited to any correspondence concerning any of the releases identified in response to the previous question.
- 32. Provide copies of any correspondence between the Basinger PT and local, state, or federal authorities concerning the use, handling, disposal, or remediation of hazardous substances at the Facility, including but not limited to any correspondence concerning any of the releases identified in response to the previous question.
- Provide copies of any correspondence between the Basingers as Individuals and local, state, or federal authorities concerning the use, handling, disposal, or remediation of hazardous substances at the Facility, including but not limited to any correspondence concerning any of the releases identified in response to the previous question.
- 34. Provide a list of any hazardous substances that the Trust knew, at the time it purchased the Facility, had been used or disposed of at the Facility.
- Provide a list of any hazardous substances that the Basinger PT knew, at the time it purchased the Facility, had been used or disposed of at the Facility.
- 36. Provide a list of any hazardous substances that the Basingers as Individuals knew, at the time they purchased the Facility, had been used or disposed of at the Facility.
- 37. Describe what the Trust knew about any business operations at the Facility at the time it purchased the Facility.
- 38. Describe what the Basinger PT knew about any business operations at the Facility at the time it purchased the Facility.
- 39. Describe what the Basingers as Individuals knew about any business operations at the Facility at the time they purchased the Facility.

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# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION IX

75 Hawthorne Street San Francisco, CA 94105

RETURN RECEIPT REQUESTED
Certified Mail #: 7005 3110 0002 8246 8995

APR 1 1 2005

Linda Wagner Lipscomb, Trustee Wagner Trust

# FX-6 Personal Privacy

Re: General Notice Letter/104(e) for the San Fernando Valley/North Hollywood Superfund Site
North Hollywood, California

Dear Ms. Lipscomb:

Under the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA"), commonly known as the federal "Superfund" law, the U.S. Environmental Protection Agency ("EPA") is responsible for responding to the release or threat of release of hazardous substances and pollutants or contaminants into the environment—that is, for stopping further contamination from occurring and for cleaning up or otherwise addressing any contamination that has already occurred. EPA has documented that hazardous substances and pollutants or contaminants were released at the San Femando Valley Area 1 site, North Hollywood Operable Unit ("NHOU" or "the Site"), located in Los Angeles County, California. EPA has spent public funds to investigate and control releases of hazardous substances or potential releases of hazardous substances at the Site. EPA has determined that the Wagner Trust ("the Trust") may be responsible under Superfund for cleanup of the Site or costs EPA has incurred in cleaning up the Site.

### **Explanation of Potential Liability**

Under CERCLA, specifically Sections 106(a) and 107(a), potentially responsible parties ("PRPs") may be required to perform cleanup actions to protect the public health, welfare, or the environment. PRPs may also be responsible for costs incurred by EPA in cleaning up the Site. PRPs include current owners or operators of a site, former owners or operators during disposal, as well as persons who arranged for treatment and/or disposal of any hazardous substances found at the site and persons who accepted hazardous substances for transport and selected the site to which the hazardous substances were delivered.

Based on the information collected, EPA believes that the Trust may be liable for contamination of soils and groundwater at the Site under Section 107(a) of CERCLA. Liability is based on the Trust's status as a current owner of real property within the Site, from which contaminants, including but not limited to trichloroethylene ("TCE") and tetrachloroethylene ("PCE"), were released into the environment.

To date, EPA has taken several response actions at the Site under the authority of CERCLA. In 1989, EPA issued an Interim Record of Decision ("ROD") in which EPA selected an interim remedy for the Site. The interim remedy, which was expected to last fifteen years, required the extraction and treatment of PCE and TCE from groundwater and delivery of the treated groundwater to the City of Los Angeles's public drinking water system. Since 1989, EPA has funded the operation and maintenance ("O&M") of the interim remedy. Initially, EPA funded the O&M using Superfund money. Subsequently, EPA entered into two consent decrees with PRPs at the Site, including one to which Joseph Basinger, as an individual, was a signatory. EPA has used the funds recovered in those settlements to fund the O&M of the interim remedy. At this time, the EPA is considering selecting further remedial actions at the Site.

EPA will incur further costs to evaluate, select, and implement further response actions at the Site. This general notice letter provides you with advance notice that EPA may seek to recover its costs from the Trust for such response actions, and/or may ask the Trust to perform work at the Site.

### Financial Concerns/Ability to Pay Settlements

EPA is aware that the financial ability of some PRPs to contribute toward the payment of response costs at the Site may be substantially limited. If you believe, and can document, that the Trust falls within that category, please contact Kim Muratore of EPA at 75 Hawthome Street, San Francisco, CA, 94105, (415) 972-3121, <a href="muratore.kim@epa.gov">muratore.kim@epa.gov</a>, for information on "Ability-to-Pay Settlements." If you make a limited-ability-to-pay claim on behalf of the Trust, you will receive a letter requesting certain financial information from the Trust such as tax returns, financial statements, etc., that EPA will use to conduct its analysis. If EPA concludes that the Trust has a legitimate inability to pay the full amount of EPA's costs, EPA may offer a schedule for payment over time or a reduction in the total amount demanded from the Trust.

### **Information to Assist the Trust**

EPA would like to encourage communication between the Trust, other PRPs, and EPA. EPA typically recommends that all PRPs meet to select a "steering committee" that will be responsible for representing the group's interests. Establishing a manageable group is critical to successful negotiations with EPA. If this is not possible, EPA encourages each PRP to select one person from its company or organization to represent its interests to EPA. To assist the Trust in its efforts to communicate, we have enclosed a list of names and addresses of PRPs to whom this letter, or a very similar letter, is being sent. (Enclosure A)

EPA will establish an Administrative Record that contains documents that serve as the basis for EPA's selection of further cleanup actions for the Site. The Administrative Record for the 1989 ROD is located at the Los Angeles Department of Water and Power Library, 111 North Hope Street, Room 516, Los Angeles, CA, phone (213) 367-1995, and is available to the Trust and the public for inspection. The Administrative Record is also available for inspection at the Superfund Records Center, EPA Region 9, 95 Hawthorne Street, 4<sup>th</sup> floor, San Francisco, CA 94105. As EPA moves forward with selection of further response actions for the Site, EPA will supplement the Administrative Record. EPA also may issue advance notice of the proposed action(s) for public comment.

### Resources and Information for Small Businesses

As you may be aware, on January 11, 2002, President Bush signed into law the Superfund Small Business Liability Relief and Brownfields Revitalization Act. This Act contains several exemptions and defenses to CERCLA liability, that we suggest all parties evaluate. You may obtain a copy of the law via the Internet at <a href="http://www.epa.gov/swerosps/bf/sblrbra.htm">http://www.epa.gov/swerosps/bf/sblrbra.htm</a> and review EPA guidances regarding these exemptions at <a href="http://www.epa.gov/compliance/resources/policies/cleanup/superfund">http://www.epa.gov/compliance/resources/policies/cleanup/superfund</a>.

In addition, if you are a "service station dealer" who accepts used oil for recycling, you may qualify for an exemption from liability under Section 114(e) of CERCLA. EPA guidance regarding this exemption can be found on the Internet at <a href="http://www.epa.gov/compliance/resources/policies/cleanup/superfund">http://www.epa.gov/compliance/resources/policies/cleanup/superfund</a>. If you believe you may qualify for the exemption, please contact Assistant Regional Counsel Michael Massey at 75 Hawthorne Street, San Francisco, CA, 94105, 415-972-3034, or e-mail him at <a href="massey.Michael@epa.gov">Massey.Michael@epa.gov</a>, to request an application/information request specifically designed for service station dealers.

EPA has created a number of helpful resources for small business. EPA has established the National Compliance Assistance Clearinghouse as well as Compliance Assistance Centers which offer various forms of resources to small businesses. You may inquire about these resources at <a href="https://www.epa.gov">www.epa.gov</a>. In addition, the EPA Small Business Ombudsman may be contacted at <a href="https://www.epa.gov/sbo">www.epa.gov/sbo</a>. Finally, EPA developed a fact sheet about the Small Business Regulatory Enforcement Fairness Act ("SBREFA"), which is enclosed with this letter. (Enclosure B)

### **CERCLA 104(e) Information Request**

EPA believes that the Trust may have information which could assist the California Regional Water Quality Control Board ("RWQCB") and EPA in their investigation of the groundwater at the Site, especially with regard to TCE, PCE, and chromium, and requests that the Trust answer the questions contained in Enclosure D. Definitions and instructions on how to respond to the questions are provided in Enclosure C.

Under Section 104(e) of CERCLA, 42 U.S.C. §9604(e), EPA has broad information gathering authority which allows EPA to require persons to furnish information or documents relating to:

- (A) The identification, nature, and quantity of materials which have been or are generated, treated, stored, or disposed of at a vessel or facility or transported to a vessel or facility.
- (B) The nature or extent of a release or threatened release of a hazardous substance or pollutant or contaminant at or from a vessel or facility.
- (C) Information relating to the ability of a person to pay for or perform a cleanup.

Please note that the Trust's compliance with this information request is mandatory. Failure to respond fully and truthfully may result in an enforcement action by EPA pursuant to Section 104(e)(5) of CERCLA, 42 U.S.C. §9604(e)(5). This statutory provision authorizes EPA to seek the imposition of penalties of up to \$32,500 per day of noncompliance. Please be further advised that provision of false, fictitious, or fraudulent statements or representations may subject you to criminal penalties under 18 U.S.C. §1001. The information the Trust provides may be used by EPA in administrative, civil, or criminal proceedings.

Some of the information EPA is requesting may be considered by the Trust to be confidential. Please be aware that the Trust may not withhold the information upon that basis. If the Trust wishes EPA to treat the information confidentially, it must advise EPA of that fact by following the procedures outlined in Enclosure C, including the requirement for supporting its claim for confidentiality.

This request for information is not subject to review by the Office of Management and Budget ("OMB") under the Paperwork Reduction Act because it is not an "information collection request" within the meaning of 44 U.S.C. §§3502(3), 3507, 3512, and 3518(c)(1). See also, 5 C.F.R. §§1320.3(c), 1320.4, and 1320.6(a).

We encourage the Trust to give this matter immediate attention and request that it provide a complete and truthful response to this information request within thirty (30) calendar days of its receipt of this letter. EPA is committed to moving forward with its investigation and extensions of time for responses will only be granted upon a showing of good cause. If the Trust anticipates that it will need an extension, please request one as soon as possible. Requests for extensions made at or near the due date will not be viewed favorably by EPA. The Trust's response to this letter should be made in writing and signed by you or another duly authorized representative of the Trust. If some or all of the requested information has previously been provided to EPA, the Trust may incorporate that information by referencing the date of the earlier response and the information contained therein that is responsive to the current information request.

The Trust's response should include the appropriate name, address, and telephone number of the person to whom EPA should direct future correspondence in regard to this information request. The Trust's response to the information request should be directed to:

Kim Muratore, Case Developer (SFD-7-B) U.S. EPA, Region 9 75 Hawthorne St. San Francisco, CA 94105

Please also provide the appropriate name, address, and telephone number of the person to whom EPA should direct future correspondence with regard to the general notice portion of this letter. If the Trust has any questions regarding this letter or the Site's cleanup status, please contact the Remedial Project Manager, Rachel Loftin at (415) 972-3253, <a href="loftin.rachel@epa.gov">loftin.rachel@epa.gov</a>. Questions regarding settlement or legal matters can be directed to Michael Massey at 415-972-3034 or e-mail at <a href="massey.Michael@epa.gov">Massey.Michael@epa.gov</a>. Thank you for your prompt attention to this matter.

Sincerely,

Elizabeth Adams, Chief

Superfund Division

Enclosures (4)

cc: Patricia M. O'Toole, Esq. The O'Toole Law Firm P.O. Box 352348 Los Angeles, CA 90035-0260

## **ENCLOSURE D: INFORMATION REQUEST**

- 1. State the full legal name, address, telephone number, position(s) held by, and tenure of the individual(s) answering any of the questions below on behalf of the Wagner Trust ("the Trust").
- 2. Information obtained by EPA indicates that the Trust co-owns or co-owned together with the JW & VM Basinger Trust PT the real property at 11310 Sherman Way, Sun Valley, California (the "Facility" or the "Hawker Pacific Facility"). EPA's information also indicates that the Facility was previously co-owned by the JW & VM Basinger PT and the Wagner Trust, and before that by Joseph & Viola Basinger and Gordon & Peggy Wagner, as individuals. Henceforth, the term "Facility" shall be interpreted to include both the real property at 11310 Sherman Way, Sun Valley, California, and any improvements thereto. Provide the following information with respect to the Trust's ownership of the Facility:
  - a. The dates the Trust owned the Facility;
  - b. The parcel number(s) and corresponding street address(es) for the Facility;
  - c. A copy of each document evidencing the purchase, ownership, and sale of the Facility;
  - d. The current or last known address and phone number of any and all other current and previous owners of the Facility;
  - e. A copy of each lease, rental agreement, or any other document between the Trust and any business that operated at the Facility for all periods of time that the Trust owned the Facility; and
  - f. Each type of business, commercial, or industrial operation conducted at the Facility, and the name of each operator and the dates that each was operating.
- 3. Provide the following information with respect to Gordon and Peggy Wagner's ("the Wagners") ownership of the Facility:
  - a. The dates the Wagners owned the Facility;
  - b. The parcel number(s) and corresponding street address(es) for the Facility;
  - c. A copy of each document evidencing the purchase, ownership, and sale of the Facility;
  - d. The current or last known address and phone number of any and all other current and previous owners of the Facility;
  - e. A copy of each lease, rental agreement, or any other document between the Wagners and any business that operated at the Facility for all periods of time that the Wagners owned the Facility; and
  - f. Each type of business, commercial, or industrial operation conducted at the Facility, and the name of each operator and the dates that each was operating.
- 4. With regard to the Trust:
  - a. Provide a complete copy of the document(s) establishing the Trust;
  - b. Provide a complete copy of any amendments or updates to the Trust documents;
  - c. Provide a complete listing of current trust assets for the Trust and indicate the current market value of each Trust asset as well as the dollar value of any liabilities of

- the Trust; and
- d. Provide a complete, signed copy of the last Federal and State income tax returns filed for the Trust, including any schedules, footnotes, or attachments.
- e. Identify all current trustees of the Trust, and provide their full names, current addresses, telephone numbers, and dates that each has acted as trustee.
- 5. Identify the individuals who are or were responsible for environmental matters at the Facility both during and before the Trust's ownership of the Facility. For each individual responsible for environmental matters, provide their full names and the company they worked for, their current or last known addresses, telephone numbers, position titles, and the dates each individual held such position.
- 6. Identify the individuals who are or were responsible for environmental matters at the Facility both during and before the Wagner's ownership of the Facility. For each individual responsible for environmental matters, provide their full names and the company they worked for, their current or last known addresses, telephone numbers, position titles, and the dates each individual held such position.
- 7. Provide a scaled map of the Facility which includes the locations of significant buildings and features. Indicate the locations of any maintenance shops, machine shops, degreasers, liquid waste tanks, chemical storage tanks, and fuel tanks. Provide a physical description of the Facility and identify the following:
  - a. Surface structures (e.g., buildings, tanks, containment and/or storage areas, etc.)
  - b. Subsurface structures (e.g., underground tanks, sumps, pits, clarifiers, etc.);
  - c. Groundwater and dry wells, including drilling logs, date(s) of construction or completion, details of construction, uses of the well(s), date(s) the well(s) was/were abandoned, depth to groundwater, depth of well(s) and depth to and of screened interval(s);
  - d. Past and present stormwater drainage system and sanitary sewer system, including septic tank(s) and subsurface disposal field(s);
  - e. Any and all additions, demolitions or changes of any kind to physical structures on, under or about the Facility or to the property itself (e.g., excavation work), and state the date(s) on which such changes occurred; and
  - f. The location of all waste storage or waste accumulation areas as well as waste disposal areas, including but not limited to dumps, leach fields, and burn pits.
- 8. Provide copies of hazardous material business plans and chemical inventory forms (originals and updates) submitted to city, county, and state agencies.
- 9. Provide a list of all chemicals and hazardous substances used at the Facility during any portion of time that the Trust owned the Facility, identifying the chemical composition and quantities used. Provide copies of Material Safety Data Sheets for all hazardous substances used.

- 10. Provide a list of all chemicals and hazardous substances used at the Facility during any portion of time that the Wagners owned the Facility, identifying the chemical composition and quantities used. Provide copies of Material Safety Data Sheets for all hazardous substances used
- 11. Identify and provide the information below for all volatile organic compounds (most notably PCE; TCE; 1,1-DCE; MTBE; ,14-DCA, cis-1,2-DCE; and carbon tetrachloride); Title 22 metals including total and hexavalent chromium; 1,4-dioxane; N-nitrosodymethylamine (NDMA); perchlorate; which are or were used at, or transported to, the Facility:
  - a. The trade or brand name, chemical composition, quantity used for each chemical or hazardous substance and the Material Safety Data Sheet for each product;
  - b. The location(s) where each chemical or hazardous substance is or was used, stored, and disposed of;
  - c. The kinds of wastes (e.g., scrap metal, construction debris, motor oil, solvents, waste water), the quantities of wastes, and the methods of disposal for each chemical, waste, or hazardous substance;
  - d. The quantity purchased (in gallons), the time period during which it was used, and the identity of all persons who used it; and
  - e. The supplier(s), and provide copies of all contracts, service orders, shipping manifests, invoices, receipts, canceled checks, or any other documents pertaining to the supply of chemicals or hazardous substances.
- 12. Documentation provided to EPA shows that in 2005, an investigation was conducted at the behest of the JW & VM Basinger Trust PT, along with the Wagner Trust and Hawker Pacific Aerospace, to determine the presence and extent of chromium contamination in the soil at the Facility. Provide copies of all environmental data or technical or analytical information regarding soil, water, and air conditions at or adjacent to the Facility, including, but not limited to, environmental data or technical or analytical information related to soil contamination, soil sampling, soil gas sampling, geology, water (ground and surface), hydrogeology, groundwater sampling, and air quality.
- 13. Identify, and provide the following information for, all groundwater wells that are located at the Facility:
  - a. A map with the specific locations of the Facility groundwater wells;
  - b. Date the Facility groundwater wells were last sampled;
  - c. List of all constituents which were analyzed during groundwater sampling events; and
  - d. All groundwater sampling results, reports of findings, and analytical data.
- 14. Identify all insurance policies held by the Trust during all periods of time that the Trust owned the Facility. Provide the name and address of each insurer, the policy number, the amount of coverage and policy limits, the type of policy, and the expiration date of each policy. Include all comprehensive general liability policies and "first party" property insurance policies and all environmental impairment insurance. Provide a complete copy of

- 24. Provide copies of any correspondence between the Trust and local, state, or federal authorities concerning the use, handling, disposal, or remediation of hazardous substances at the Facility, including but not limited to any correspondence concerning any of the releases identified in response to the previous question.
- 25. Provide copies of any correspondence between the Wagners and local, state, or federal authorities concerning the use, handling, disposal, or remediation of hazardous substances at the Facility, including but not limited to any correspondence concerning any of the releases identified in response to the previous question.
- 26. Provide a list of any hazardous substances that the Trust knew, at the time it purchased the Facility, had been used or disposed of at the Facility.
- 27. Provide a list of any hazardous substances that the Wagners knew, at the time they purchased the Facility, had been used or disposed of at the Facility.
- 28. Describe what the Trust knew about any business operations at the Facility at the time it purchased the Facility.
- 29. Describe what the Wagners knew about any business operations at the Facility at the time they purchased the Facility.

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# Exhibit A

### **EXHIBIT A**

# Request # 1 to Basinger Trusts and to Wagner Trusts:

State the full legal name, address, telephone number, position(s) held by, and tenure of the individual(s) answering any of the questions below on behalf of the JW & VM Basinger Trust PT and the Wagner Trust.

# BW Trusts' Response:

Patricia M. O'Toole, Esq. The O'Toole Law Firm P.O. Box 352348 Los Angeles, CA 90035-0260

Telephone: (213) 630-4220

Attorney for the Basinger Trusts and the Wagner Trusts (the "BW Trusts")

# Exhibit B

#### **EXHIBIT B**

# Request # 2a, 3a and 4a to Basinger Trusts and # 2a and 3a to Wagner Trusts:

The dates that the various Basinger and Wagner trusts, and Joseph and Viola Basinger and Gordon and Peggy Wagner as individuals, owned the Facility.

### **BW Trusts' Response:**

### May 12, 1966

F":

Gordon N. Wagner and Peggy M. Wagner, husband and wife, as joint tenants, purchased an undivided 2/3 interest in the real property. Joseph W. Basinger and Viola Marie Basinger, husband and wife, as joint tenants, purchased an undivided 1/3 interest in the real property. The seller was Mustang Motor Products Corporation.

### May 12, 1989

Gordon N. Wagner and Peggy M. Wagner transferred their interest in the real property to Gordon N. Wagner and Peggy M. Wagner, Trustees, The Wagner Living Trust, U/A Dated April 5, 1989.

## March 26, 1996

Joseph W. Basinger and Viola Marie Basinger quitclaimed their 1/3 interest in the real property to Joseph W. Basinger and Viola M. Basinger, Trustees, the J.W. and V.M. Basinger Revocable Trust dated December 30, 1986, as amended.

### December 5, 1997

Peggy M. Wagner, sole successor Trustee, transferred the 2/3 interest of The Wagner Living Trust, U/A Dated April 5, 1989, in the real property, as follows: a 30.38% interest to The Wagner Residual "A" Trust u/a Dated April 5, 1989; a 1.84% interest to The Wagner Residual "B" Trust u/a Dated April 5, 1989; and a 14.45% interest to The Wagner Marital Trust u/a Dated April 5, 1989.

### November 24, 1998

Viola M. Basinger, sole successor Trustee, quitclaimed the 1/3 interest of the J.W. and V.M. Basinger Revocable Trust established on December 30, 1986, in the real property, as follows: an undivided one-half interest to Viola M. Basinger, Trustee of Trust B (the Exemption Trust) u/t J.W. and V.M. Basinger Revocable Trust established on December 30, 1986, and an undivided one-half interest to Viola M. Basinger, Trustee of Trust C (the Marital Trust) u/t J.W. and V.M Basinger Revocable Trust established on December 30, 1986.

# Exhibit C

#### **EXHIBIT C**

# Request # 2b, 3b and 4b to Basinger Trusts and # 2b and 3b to Wagner Trusts:

The parcel number(s) and corresponding street address(es) for the Facility.

## BW Trusts' Response:

The street address for the Facility is 11310 Sherman Way, Sun Valley, California 91352. There are three buildings on the parcel (Buildings 1, 2 and 3), which are operated by Hawker Pacific Aerospace.

The Los Angeles County Assessor's Identification Number is 2319-001-006.

Please note that Hawker Pacific Aerospace operates on two separate, adjacent parcels. Only the parcel listed above is owned by the BW Trusts.

The street address for the other parcel on which Hawker Pacific Aerospace operates is 11240 Sherman Way, Sun Valley, California 91352. The Los Angeles County Assessor's Identification Number for the other parcel is 2319-001-005. The owner of the other parcel is Industrial Bowling Corp., 1819 W. Olive Avenue, Burbank, California 91506. Hawker Pacific Aerospace operates in five buildings on that parcel (Buildings 4, 5, 6, 7 and 8).

# Exhibit D

### **EXHIBIT D**

# Request #7, 8 and 9 to Basinger Trusts and #5 and 6 to Wagner Trusts:

Identify the individuals who are or were responsible for environmental matters at the Facility both during and before the various Basinger and Wagner trusts', and Joseph and Viola Basinger and Gordon and Peggy Wagner as individuals, ownership of the Facility. For each individual responsible for environmental matters, provide their full names and the company they worked for, their current or last known addresses, telephone numbers, position titles, and the dates each individual held such position.

# BW Trusts' Response:

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The BW Trusts are passive owners of the real property on which Hawker Pacific Aerospace, its predecessors, and previous tenants have operated from 1966 to the present. The BW Trusts have no knowledge regarding responsibilities for environmental matters in the conduct of Hawker Pacific Aerospace's or such other tenants' operations on the parcel owned by the BW Trusts (or on the adjacent parcel that is also operated by Hawker Pacific Aerospace and is owned by Industrial Bowling Corp.).

It is possible that information responsive to the above requests is contained in the various correspondence and reports attached in response to Request # 16, 30, 31, 32 and 33 to the Basinger Trusts and # 12, 23, 24 and 25 to the Wagner Trusts (see Exhibits G, L and M).

# Exhibit E

#### **EXHIBIT E**

#### Request # 10 to Basinger Trusts and # 7 to Wagner Trusts:

Provide a scaled map of the Facility which includes the locations of significant buildings and features. Indicate the locations of any maintenance shops, machine shops, degreasers, liquid waste tanks, chemical storage tanks, and fuel tanks. Provide a physical description of the Facility and identify the following:

- a. Surface structures (e.g., buildings, tanks, containment and/or storage areas, etc.)
- b. Subsurface structures (e.g., underground tanks, sumps, pits, clarifiers, etc.);
- c. Groundwater and dry wells, including drilling logs, date(s) of construction or completion, details of construction, uses of the well(s), date(s) the well(s) was/were abandoned, depth to groundwater, depth of well(s) and depth to and of screened interval(s);
- d. Past and present stormwater drainage system and sanitary sewer system, including septic tank(s) and subsurface disposal field(s);
- e. Any and all additions, demolitions or changes of any kind to physical structures on, under or about the Facility or to the property itself (e.g., excavation work), and state the date(s) on which such changes occurred; and
- f. The location of all waste storage or waste accumulation areas as well as waste disposal areas, including but not limited to dumps, leach fields, and burn pits.

#### **BW Trusts' Response:**

Two buildings (Buildings 1 and 2) were present when the 11310 Sherman Way parcel was purchased in 1966 by Gordon and Peggy Wagner and Joseph and Viola Basinger. The third, tilt-up building at the rear of the parcel (Building 3) was constructed in approximately 1976.

An underground tank and small sump were removed from the Facility in 1991 (see Exhibit L). To the best of the BW Trusts' knowledge, there are no groundwater or dry wells on the property. Other information responsive to the above requests may be contained in the various correspondence and reports attached in response to Request # 16, 30, 31, 32 and 33 to the Basinger Trusts and # 12, 23, 24 and 25 to the Wagner Trusts (see Exhibits G, L and M).

The BW Trusts are passive owners of the real property on which Hawker Pacific Aerospace, its predecessors, and previous tenants have operated from 1966 to the present. The BW Trusts have limited knowledge regarding Hawker Pacific Aerospace's or such other tenants' operations on the parcel owned by the BW Trusts (or on the adjacent parcel that is also operated by Hawker Pacific Aerospace and is owned by Industrial Bowling Corp.). However, the BW Trusts expect that information responsive to the above requests will be submitted by Hawker Pacific Aerospace in response to EPA's information request to Hawker Pacific Aerospace.

# Exhibit F

#### **EXHIBIT F**

## Request # 11, 12, 13, 14 and 15 to Basinger Trusts and # 8, 9, 10 and 11 to Wagner Trusts:

Provide copies of hazardous material business plans and chemical inventory forms (originals and updates) submitted to city, county, and state agencies.

Provide a list of all chemicals and hazardous substances used at the Facility during any portion of time that the various Basinger and Wagner trusts', and Joseph and Viola Basinger and Gordon and Peggy Wagner as individuals, owned the Facility, identifying the chemical composition and quantities used. Provide copies of Material Safety Data Sheets for all hazardous substances used.

Identify and provide the information below for all volatile organic compounds (most notably PCE; TCE; 1,1-DCE; MTBE; 1,4-DCA, cis-1,2-DCE; and carbon tetrachloride); Title 22 metals including total and hexavalent chromium; 1,4-dioxane; N-nitrosodymethylamine (NDMA); perchlorate; which are or were used at, or transported to, the Facility:

- a. The trade or brand name, chemical composition, quantity used for each chemical or hazardous substance and the Material Safety Data Sheet for each product;
- b. The location(s) where each chemical or hazardous substance is or was used, stored, and disposed of;
- c. The kinds of wastes (e.g., scrap metal, construction debris, motor oil, solvents, waste water), the quantities of wastes, and the methods of disposal for each chemical, waste, or hazardous substance;
- d. The quantity purchased (in gallons), the time period during which it was used, and the identity of all persons who used it; and
- e. The supplier(s), and provide copies of all contracts, service orders, shipping manifests, invoices, receipts, canceled checks, or any other documents pertaining to the supply of chemicals or hazardous substances.

#### BW Trusts' Response:

.

The BW Trusts are passive owners of the real property on which Hawker Pacific Aerospace, its predecessors, and previous tenants have operated from 1966 to the present. The BW Trusts have limited knowledge regarding Hawker Pacific Aerospace's or such other tenants' operations on the parcel owned by the BW Trusts (or on the adjacent parcel that is also operated by Hawker Pacific Aerospace and is owned by Industrial Bowling Corp.). However, the BW Trusts expect that information responsive to the above requests will be submitted by Hawker Pacific Aerospace in response to EPA's information request to Hawker Pacific Aerospace. *See also* Exhibits G, L and M.

# Exhibit G

#### **EXHIBIT G**

#### Request # 16 to Basinger Trusts and # 12 to Wagner Trusts:

Documentation provided to EPA shows that in 2005, an investigation was conducted at the behest of the JW & VM Basinger Trust PT, along with the Wagner Trust and Hawker Pacific Aerospace, to determine the presence and extent of chromium contamination in the soil at the Facility. Provide copies of all environmental data or technical or analytical information regarding soil, water, and air conditions at or adjacent to the Facility, including, but not limited to, environmental data or technical or analytical information related to soil contamination, soil sampling, soil gas sampling, geology, water (ground and surface), hydrogeology, groundwater sampling, and air quality.

#### BW Trusts' Response:

Copies of the investigation workplan, the investigation report and all related correspondence to and from the Regional Water Quality Control Board – Los Angeles Region, which are in the possession, custody or control of the BW Trusts, are attached, as follows:

- 1. 03/15/04 Letter from RWQCB to Aaron Rosen Attorney for Wagner Resinger [sic], Requirement for a Technical Investigation Report Pursuant to California Water Code Section 13267 Hawker Pacific Inc. (Flight Accessory Services Division), 11310 Sherman Way, Sun Valley California (File No. 111.0436).
- 2. 05/14/04 Letter from RWQCB to Mr. Don Basinger, Request for an Extension to Submit a Technical Investigation Report Pursuant to California Water Code Section 13267 Hawker Pacific Inc. 11310 Sherman Way, Sun Valley, California (File No. 111.0436).
- 3. 06/14/04 Work Plan for an Hexavalent Chromium Investigation in Shallow Soil, Hawker Pacific Aerospace Facility, Sun Valley, California, Prepared for Hawker Pacific Aerospace *and* the Wagner and Basinger Trusts, by Shaw Environmental & Infrastructure, Inc.
- 4. 08/27/04 Letter from RWQCB to Mr. Don Basinger, Conditional Approval Technical Investigation Report Pursuant to California Water Code Section 13267 Hawker Pacific Aerospace 11310 Sherman Way, Sun Valley, California (File No. 111.0436).
- 5. 09/15/04 Letter from The O'Toole Law Firm to Mr. Alex Lapostol (RWQCB), Re: Hawker Pacific Aerospace Site Technical Investigation, File No. 111.0436.
- 6. 09/30/04 Letter from RWQCB to Hawker Pacific Aerospace, The Basinger Trusts and The Wagner Trusts, Deadline Extension for Technical Investigation Report

- Pursuant to California Water Code Section 13267 Hawker Pacific Aerospace 11240 Sherman Way, Sun Valley, California (File No. 111.0436).
- 7. 01/28/05 Report, Hexavalent Chromium Investigation in Shallow Soil, Hawker Pacific Aerospace Facility, Sun Valley, California, Prepared for Hawker Pacific Aerospace *and* The Wagner and Basinger Trusts, by Shaw Environmental & Infrastructure, Inc.
- 8. 03/16/05 Letter from RWQCB to Hawker Pacific Aerospace, The Basinger Trusts and The Wagner Trusts, No Further Requirements Hawker Pacific Aerospace 11240 Sherman Way, Sun Valley, California (File No. 111.0436).
- 9. 04/08/05 Transcription of Telephone Message from Alex Lapostol, RWQCB, to Patricia M. O'Toole, The O'Toole Law Firm, concerning scope of "No Further Requirements" letter from RWQCB dated March 16, 2005.

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## California Regional Water Quality Control Board

#### Los Angeles Region

Over 51 Years Serving Coastal Los Angeles and Ventura Counties
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320 W. 4th Street, Suite 200, Los Angeles, California 90013
Phone (213) 576-6600 FAX (213) 576-6640 - Internet Address: http://www.swrcb.ca.gov/rwqcb4

March 15, 2004

Aaron Rosen Attorney for Wagner Resinger 2246 Ridgemont Drive Los Angeles, CA 90046-1842

REQUIREMENT FOR A TECHNICAL INVESTIGATION REPORT PURSUANT TO CALIFORNIA WATER CODE SECTION 13267 – HAWKER PACIFIC INC. (FLIGHT ACCESORY SERVICES DIVISION), 11310 SHERMAN WAY, SUN VALLEY, CALIFORNIA (FILE NO. 111.0436)

#### Dear Operations Manager:

The California Regional Water Quality Control Board, Los Angeles Region, ("Regional Board") is the public agency with primary responsibility to protect groundwater and surface water quality within the Coastal Watershed of Los Angeles and Ventura Counties. This Regional Board and the United States Environmental Protection Agency (US EPA) Region IX, under the Well Investigation Program (WIP) in San Fernando Valley Groundwater Basin (SFVGB), jointly conducted an investigation between November 1998 and December 2001.

Chromium is a metallic element widely used in a variety of industrial applications such as aerospace, aircraft part, multi-purpose plating and jewelry manufacturing and it is also present in the SFVGB. Chromium concentrations exceed current safe drinking water standards at some locations and do pose an ongoing threat to the drinking water resources of the SFVGB. The California Maximum Contaminant Level (MCL) for total chromium in drinking water is 50 parts per billion (ppb).

At the onset of the chromium VI investigation, we sent out letters to property owners, tenants, companies and individuals informing them that their facility or site, previously closed under the 1986 to 1996 US EPA Superfund investigations, may be re-opened.

As you may recall, the objectives of the Superfund investigations were to:

- 1. Identify sources of chlorinated volatile organic compounds (VOCs),
- 2. Characterize the extent of contamination in soil and groundwater, to
- 3. Remediate these contaminants, and to
- 4. Reduce and eliminate the public health threat posed to water quality degradation impacting public drinking water supply wells.

New information provided to the Regional Board from the Upper Los Angeles River Area (ULARA) Watermaster indicates that some of the groundwater supply wells in the SFVGB have been contaminated by heavy metals, including hexavalent chromium (chromium VI). Upon receiving this information, we re-evaluated the Chemical Use Questionnaire (CUQ) provided by each facility from the Superfund investigation to determine which facilities stored and/or used chromium compounds, including chromium VI.

Based on the results of the CUQ review, a site inspection was then conducted by Regional Board staff to verify the CUQ information. The follow-up inspection findings and subsequent technical report entitled *The San Fernando Valley Chromium VI Investigation Report* (Phase I) written by the Regional Board staff were performed pursuant to provisions in Division 7, Chapter 4, Article 4, Section 13267 of the California Water Code. In summary, this technical report recommended that 112 sites out of the 255 suspected sites identified, warranted further investigation. More information regarding our investigation is available on the Regional Board's web-site:

#### http://www.swrcb.ca.gov/rwqcb4/html/water\_qty/chromium6report\_order.html

Your site is one of those facilities requiring further subsurface investigation. *Phase II of the San Fernando Valley Chromium VI Investigation* is now set to begin. This phase will require site assessment to be performed at all of the 112 sites identified above, including yours, to determine the nature and extent of contamination in soil from past (or present) useage, storage, treatment and/or disposal of heavy metals. With respect to the current chromium VI, and other heavy metal investigations, we have reviewed the case file and inspection report(s) for your site and have determined that chromium compounds were used and stored on-site in the past or at present. Refer to the inspection report completed by Regional board staff (enclosed).

The next step or Phase II of the current chromium VI investigation is to identify source sites contributing to the chromium contamination in the eastern SFVGB, and thus each of the 112 sites will be required to conduct subsurface investigations. Some have already completed their onsite investigations.

A review of your file indicates that there was a limited on-site soil investigation conducted under the prior Superfund Program investigation that included soil sampling and analyses during which chromium and/or other heavy metals were detected. Phase II of the Regional Board's Chromium VI Investigation is intent on determining:

1. The adequacy and scope of the prior soil investigation conducted at your site with respect to the present chromium VI investigation; and

2. Whether the total or chromium VI concentrations in the soil are indicative of background levels, or indicate that a significant release has occurred that poses an ongoing threat to public drinking water supply wells or may have already polluted groundwater resources.

If the subsurface investigation to be completed at your site detects soil contamination, then, follow-up assessment work in the form of additional soil investigation and/or groundwater assessment shall be required. In the event that we find only background levels of heavy metal constituents, this may warrant low risk review and granting final case closure after a review of the completed Phase II soil assessment report.

#### **INVESTIGATIVE AUTHORITY**

For your information, the United States Congress passed the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) in 1980 to protect public health and the environment through the investigation and remediation of sites contaminated with hazardous substances. CERCLA, as amended by the Superfund Amendments and Reauthorization Act (SARA) of 1986 granted US EPA the authority to require those responsible for the environmental contamination to pay for and/or participate in the investigation and cleanup effort. California's Porter-Cologne Act (a.k.a. California Water Code) provides the Regional Board with similar authority. Presently, the US EPA and the Regional Board are using their joint enforcement authority to investigate and remediate sources of contamination that are or maybe polluting the eastern SFVGB soils and groundwater. The current chromium investigation, lead by this Regional Board, is focused on identifying sites that are contributing to chromium contamination in the eastern SFVGB.

#### REQUIREMENTS

This Regional Board office is requiring the following, pursuant to Section 13276 of the California Water Code:

1. Submission of a technical report (hereinafter called investigation workplan) by May 15, 2004. We are providing a guidance document entitled "General WorkPlan Requirements for a Heavy Metal Soil Investigation" is provided as an enclosure (Attachment A and B) to assist you in developing the investigation workplan. Additional information can be found in our guidance manual entitled "Interim Site Assessment & Cleanup Guidebook (May1996)." which can be found the Regional Board web-site at http://www.swrcb.ca.gov/rwqcb4. The workplan must include a health and safety plan (H&SP) and must address current or former chromium storage, processing, plating, anodizing, treatment and waste disposal areas, and practices, using our attached guidance documents.

<sup>&</sup>lt;sup>1</sup> Background is defined in this context as the naturally occurring concentration of a chemical for the region or area.

- 2. Soil samples shall be collected at various depths and analyzed for Title 22 heavy metals, including chromium VI.
- 3. Pursuant to State Water Resources Control Board Resolution No. 92-49, under California Water Code Section 13304, all fieldwork related to implementing the required workplan (technical report) such as soil borings, and well design/installation, as required, must be conducted by, or under the direct responsible supervision of, a registered geologist or licensed civil engineer. All technical documents submitted to this Regional Board must be reviewed, signed and stamped by a California registered geologist, or a California registered civil engineer with at least five years hydrogeologic experience. Furthermore, the California Business and Professions Code Sections 6735, 7835, and 7835.1 require that engineering and geologic evaluations and judgements be performed by or under the direction of registered professionals. Therefore, all future work must be performed by or under the direction of a registered geologist or registered civil engineer. A statement is required in the report that the registered professional in responsible charge actually supervised or personally conducted all the work associated with the project.

Pursuant to Section 13268 of the California Water Code, failure to submit the required technical report by the due date may result in administrative civil liability imposed fine being assessed by the Regional Board, in an amount up to one thousand dollars (\$1,000) for each day the report or document is not received after May 15, 2004.

Please withhold implementation of your workplan until Regional Board staff has granted approval. If you have any questions regarding this matter, please call Mr. Mohammad Zaidi at (213) 576-6732 or Mr. Dixon Oriola at (213) 576-6803.

Sincerely,

Dennis A. Dickerson

**Executive Officer** 

Enclosures:

1. Facility Inspection Report

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2. General Workplan Requirements for a Heavy Metal Soil Investigation (Appendix A)

3. QA/QC Requirements for Title 22 Metals Analysis (Appendix B)

cc: Ms. Vera Melnyk Vecchio, California Department of Health Services

Ms. Sayareh Amirebrahimi, Department of Toxic Substances Control

Mr. David Stensby, U. S. Environmental Protection Agency, Region IX

Mr. Mark Mackowski, Upper Los Angeles River Area Watermaster

Mr. Donald R. Froelich, City of Glendale

Mr. Roger Baker, City of Burbank Planning Department

Mr. Fred Lantz, City of Burbank Water Supply Department

Mr. Brian S. Carr, Managing Director, Hawker Pacific Aerospace

#### STATE OF CALIFORNIA

California Regional Water Quality Control Board Los Angeles Region

#### GENERAL WORKPLAN REQUIREMENTS

#### FOR A

#### HEAVY METAL<sup>1</sup> SOIL INVESTIGATION

#### APPENDIX A

#### INTRODUCTION

This guidance document and the related Laboratory QC/QA Requirements for Title 22 Metals Analysis are designed to assist dischargers required to perform a heavy metal soil assessment. This document outlines all activities to be conducted by the discharger in order to complete an assessment and determine whether the soil and/or groundwater have been contaminated due to industrial and/or commercial activities at the site. The requirements itemized below are to be used when conducting an initial heavy metal soil investigation to evaluate the following:

- A. Waste discharges to the soil at potential source areas,
- B. Assess and delineate the lateral and vertical extent of soil contamination, and
- C. Soil properties that affect contaminant mobility and transport in the unsaturated zone.

The workplan must include, but is not limited to, the following items:

- 1. A technical approach including the sampling rationale and justification for the location, depth, and type of boring including the sampling interval. The boring locations must be plotted on a facility map configured to scale.
- 2. The document must include the Los Angeles County Assessors Parcel Number(s) for the property being investigated.
- 3. Soil samples must be collected from the middle of low permeability (silts and clays) or high moisture content units (saturated soils), if the individual lithologic unit is five feet thick or greater.
- 4. Describe the proposed drilling method, equipment, and procedures for borings.
- 5. Describe equipment and procedures used for the collection, handling, storage, and shipment of soil samples.
- 6. Describe decontamination and waste handling procedures.
- 7. Describe the laboratory quality assurance/quality control program.
- 8. A site-specific Health and Safety Plan (HASP) should be prepared prior to fieldwork or field sampling startup. The HASP defines minimum health and safety requirements and

<sup>&</sup>lt;sup>1</sup> California Code of Regulations; Title 22 metals, including total and hexavalent chromium

designate protocols to be followed for the field operation to comply with state and federal health and safety requirements.

9. A time schedule for the completion of the scope of work.

#### WORKPLAN FOR SUBSURFACE SOIL INVESTIGATION

A subsurface soil technical report (hereinafter workplan) will be required to assess the shallow subsurface soil to determine the impact of prior releases of heavy metal contaminants. Implementation of the workplan will determine the lateral and vertical extent of heavy metal soil contamination in the impacted areas identified.

The task of implementing the workplan involves selecting optimum boring locations within and around the source areas, collecting soil samples at depths of 1, 5, 10, 15, 20 and 25-feet below ground surface (bgs) and at every lithologic change. If not previously performed, at least one continuously cored soil boring should be drilled and logged for a complete stratigraphic column of the soils beneath the site, preferably in proximity to source area.

Unless previous data exits, at least two soil borings must be installed and sampled at two different locations away from known source areas to <u>ascertain background heavy metal</u> concentrations. These soil samples should be collected from "native soils" (not from areas of imported fill and preferably from areas that are the least likely to contain heavy metal residues due to historical operations at the facility).

Background heavy metal concentrations will be compared to values obtained from impacted areas to determine impact and will be used, along with other indices, to determine site-specific cleanup levels.

## IDENTIFICATION OF CONTAMINATED SOURCE AREAS AT HEAVY METAL USEAGE, STORAGE AND DISPOSAL AREA

- Identify the areas, based on the historical or current land use for the facility which where used for plating, chemical storage, processing, treatment and disposal.
- Identify potential source locations of heavy metal soil contamination, such as areas of former spills and leaks.
- Provide a labeled, surveyed, and scaled plot plan or diagram showing <u>current</u>, and any <u>previous</u> locations of structures used for heavy metal plating, chemical and hazardous waste storage, treatment and disposal at the facility.
- Identify locations such as aboveground tanks, vats, underground tanks, clarifiers, sumps, channels, pipelines, trenches, drains, sewer connections, seepage pits, basins, ditches, and dry wells.
- Include tables listing the functions or purposes of each structure, duration of use, chemical contents, and quantity of chemicals stored.
- If information is available on prior chemical spills provide the date of the spill, the reporting agency (i.e. Fire Department or Regional Board), and the extent of any remedial action performed.

• Also list names, addresses, duration and dates of previous site <u>owners</u> and <u>operators</u>, and types of chemical processes used.

#### FIELD PROCEDURES

The following investigation procedures must also be addressed in the workplan at a minimum.

1. Contingency plan to extend boring depths if evidence exists of contamination at the bottom of the borehole.

During drilling and soil sampling, all the boring logs must be prepared by or under the direct supervision of a State of California Registered Geologist (RG), or Registered Civil Engineer (PE). In addition, visual indications of soil contamination must be noted such as staining, and discoloration, olfactory indicators, estimation of percentages of the different soil types, range in grain sizes, degree of grading/sorting, moisture content, porosity. Unique sample identification and locations must be provided.

- 2. Provide complete and legible boring logs that will include:
  - a) A description of earth materials, conditions (moisture, color, etc.), and classifications per Unified Soil Classification System (USCS);
  - b) A lithographic column with USCS abbreviations and symbols;
  - c) Labeled sample depths (measured in feet);
  - d) A record of penetration in blows per foot (blow counts) and inches (or percent) of sample recovered;
  - e) A California registered professional must sign each boring log.
- 3. An appropriate number of quality control samples collected.
- 4. All the boreholes must be back-filled in accordance with requirements listed in California Well Standards Bulletin 74-90, California Department of Water Resources, (June 1991).
- 5. Investigation-derived wastes must be disposed of in Department of Transportation approved containers, or transported to a US EPA approved waste management facility.
- 6. Following receipt of laboratory analytical results, submit a technical report (site investigation report) to the Regional Board for review and approval. The report must contain a description of field activities, procedures used, a discussion of analytical results and delineation of contaminants in the shallow soil, data interpretation, conclusions and recommendations. Boring logs, laboratory analytical results, and chain of custody forms should be included in the appendices. Figures must include a surveyed map showing the locations of the contaminant source areas or structures, a map showing surveyed soil sample and boring locations, and iso-concentration maps for significant contaminants discovered.

If the results of the site investigation have not fully delineated the contamination, then a workplan to completely define the extent of soil and/or groundwater impacts is to be included with your site investigation report pursuant to Section 13267 of the California Water Code.

7. Comply with the Regional Board's chain of custody procedures regarding soil samples. Samples must be handled and analyzed per the *General Requirements Laboratory QC/QA for Title 22 Heavy Metals Analysis* (APPENDIX B).

#### **OPTIONAL SOIL PARAMETERS:**

Additional soil data collection may be considered during site assessment and/or remediation phases for site-specific risk assessment and/or fate and transport modeling.

Soil samples shall be collected from different lithological units at various locations and depths, and sent to a California certified laboratory for determining the following parameters:

- (a) Water-Solid adsorption/distribution coefficient (Kd)
- (b) Fraction of organic carbon content (foc)
- (c) Grain-size distribution (ASTM D 422-630)
- (d) Effective soil porosity
- (e) pH (ASTM G51-77)
- (f) Bulk density or Specific Gravity (ASTM D 854-83)
- (g) Soil moisture content (ASTM D 2216-80)
- (h) Plasticity index for clayey and silty materials (Atterberg Limits)
- (i) Gas permeability (if possible).

#### LABORATORY METHOD FOR ANALYSES OF SOIL SAMPLES

For the purpose of screening soil samples for Title 22 heavy metal contaminants, the Regional Board will accept the use of EPA Method 6010B. However, for certain Title 22 metals of concern, EPA Method 6020 may be required to achieve meet the required detection limits for reporting. EPA Method 7199 and EPA Method 245.5 will be required to provide a quantitative value for hexavalent chromium, and mercury, respectively.

#### LABORATORY CERTIFICATION

The Regional Board requires that all laboratories performing analyses on any samples be certified by the California Department of Health Services' (DHS) Environmental Laboratory Accreditation Program (ELAP). For a listing of accredited laboratories refer to the DHS website:

http://www.dhs.ca.gov/ps/ls/elap/ELAPnames/Laboratory 19.htm

#### SPECIAL TRAINING REQUIREMENTS/CERTIFICATION

All personnel working in the field or in the laboratory will hold current certification showing that they have received training in accordance with requirements specified in 29 CFR 1910.120 (Occupational Safety and Health [OSHA]) regulations, or any other regulatory training/certification requirements.

#### SURVEY DATA FOR SOIL DATA

All soil data points (soil borings) shall be surveyed relative to longitude and latitude coordinates. Acceptable quality data may come from a commercially available, hand held global positioning system (GPS) device.

#### **DOCUMENT SUBMITTAL REQUIREMENTS**

Deliverables and technical reports include, but are not limited to, workplans, workplan addenda, investigation reports, design reports, quarterly groundwater monitoring reports, report addenda, and letter responses to Regional Board comments. Site plans with proposed soil boring locations must be submitted in an AutoCADD or GIS format that can be input into a spatial or GIS database.

Electronic copies of reports may be submitted in Adobe PDF format via e-mail or, for those files that exceed 1 megabyte in size, on CD-ROM or floppy disk.

Parties shall submit paper and electronic copies of all deliverables and technical reports in the quantities indicated, to the following:

#### 2 paper copies, 1 electronic copy

Mr. Dixon Oriola (doriola@rb4.swrcb.ca.gov)
California Regional Water Quality Control Board,
Los Angeles Region
320 West 4<sup>th</sup> Street, Suite 200
Los Angeles, CA 90013

#### STATE OF CALIFORNIA

#### California Regional Water Quality Control Board Los Angeles Region

#### REQUIREMENTS FOR

#### LABORATORY QUALITY ASSURANCE / QUALITY CONTROL (QA/QC)

#### TITLE 22 HEAVY METALS ANALYSES

#### APPENDIX B

The following requirements are not a replacement or substitution for US EPA Method requirements that must be followed by certified testing laboratories. These requirements serve as a specific clarification to the Regional Board's QA/QC objectives in addition to US EPA method requirements. Laboratories must comply with these requirements as well. All samples are to be submitted to a testing laboratory under strict Chain-of-Custody requirements.

A QA/QC report shall include the following, at a minimum:

- 1. Matrix Spike/Matrix Spike Duplicate (MS/MSD)
- 2. Calibration, CRDLs, and Laboratory Control Sample (LCS)
- 3. Inductively Coupled Plasma (ICP) Interference Check Sample (ICS)
- 4. Serial Dilution Result (Required for Flame Atomic Absorption (AA), Graphite Fumace AA, and ICP Methods for evaluating matrix interference only)

#### **Sample Condition**

The criteria for acceptable sample conditions are dictated by the method(s) to be employed for sample analysis. The laboratory shall strive to resolve any sample condition problems before the samples are accepted for analysis. If the problems are beyond resolution, the samples should be rejected and re-sampling should be requested.

#### **Subcontracted Samples**

Samples subcontracted to another laboratory, which must be certified by ELAP, must also conform to these requirements and the results must be submitted by the subcontracted laboratory using the Regional Board's reporting format.

#### **Target Elements**

The targeted heavy metals should be those specified in assessment workplan or monitoring program, contract request or as required by the Regional Board.

#### Contract Required Detection Limits (CRDL)

The detection limits should be those required by the Regional Board, as specified in the assessment workplan/monitoring program or as specified in EPA methods used. Detection limits higher or lower than these specified below can be required based on site-specific needs.

The required Contract Required Detection Limits (CRDLs) for each element are specified below. If the sample showed high contamination and required dilution, the low CRDLs are not required for those samples.

For Water <sup>1</sup> (μg/L)
(hgr)
200
5 .
5
200
2
100
1
1000
0.1
0.3
200
100
100
5
1000
3
1 .
2000
20
2000
5
10
1000
1
2000
500

Note: micrograms per liter ( $\mu g/L$ )

<sup>1</sup> CRDL values are taken from the Regional Board's Quality Assurance Project Plan, Groundwater Division, 12/31/02 (draft)

#### Analysis Methods

Use the appropriate approved USEPA methods and report the actual method used. The procedures must be the same for initial calibration verification, continuing calibration verification, laboratory control samples, environmental samples, MS/MSD, and all other QA/QC tests.

#### Calibration

- 1. Calibrate the instrument according to method requirements and the manufacturer's guidelines.
- 2. The initial calibration must be verified and documented for every analyzed element by analysis of initial calibration verification (ICV) solution using laboratory control sample (LCS) or USEPA ICV solution. All ICV must be within 90-110% of the true values regardless of which method is used. For ICV purpose, the LCS is analyzed under the same conditions as initial standards.
- 3. Continuing calibration verification (CCV) must be performed and documented for every analyzed element and must be within 90-110% of the true value regardless of which method is used.

### Laboratory Control Samples (LCS)

LCS analysis must be performed for every 20 samples that are analyzed. The LCS must be obtained from a different supplier or a different lot from the calibration standards. If prepared inhouse, it must be prepared from a stock solution different from calibration standards. The LCS shall be analyzed under the same conditions as the samples were analyzed (i.e., processed in the same manner as a sample).

The concentration of LCS for each element must not be higher than the mid-level concentration of the calibration range (preferably no greater than 10 times the CRDL). The acceptance limits for the LCS for metal analyses are 80-120%.

### CRDL Check Standard

In order to demonstrate that the CRDLs can be achieved and any "Not Detected (ND)" results are actually "ND", a standard or series of standards are required to be analyzed at the CRDL levels for each element analyzed.

The percent recovery of LCS at CRDL level must be at least 50%. If the percent recovery is below 50%, the laboratory must investigate and solve the problems, and reanalyze all the samples which showed "ND" results prior to the investigation.

If none of the samples from the sample project showed "ND" results (i.e., they all showed results higher than CRDLs), analysis of LCS at CRDL level for that element is not required. A note should be included in the report.

#### Blanks

Results of the method blank, initial calibration blank (ICB) and continuing calibration blank (CCB) must be below CRDL for every element. If exceeded, the laboratory shall investigate the source of contamination and take corrective actions prior to proceeding with further sample analysis. Any disclaimer statement such as the following example concerning the blank and interpretation of result will not be acceptable and should not be included in report: "Results should not be considered reliable unless the sample result exceeds five times (5X) the CRDL or ten times (10X) the blank concentration."

#### Matrix Spike/Matrix Spike Duplicate (MS/MSD)

MS/MSD analyses should be performed for every project (for each site) at a minimum rate of one per 20 samples or per batch, whichever is more often. If the project consists of both liquid and solid samples, MS/MSD should be performed for each matrix. The spiking concentration for the MS/MSD analyses should be within the calibration range.

The acceptance limit should agree with EPA guidelines for each method used. If there are no EPA guidelines, it may be determined in a range by in-house laboratory control charts. Data for the control charts must be submitted upon request. Trace levels of the analyte may be used in MS/MSD calculations even if reported as non-detected on the report form.

#### Sample Analysis

All samples must be analyzed to comply with CRDL requirements shown above. If concentrations of elements present in samples are known to be high (outside the calibration range) from previous analyses or confirmative information, the samples can be directly diluted and then analyzed. Low CRDL will not be applicable for these samples if they are found to be high. If not, an undiluted sample must be reanalyzed to meet the CRDL requirements.

## Inductively Coupled Plasma (ICP) Interference Check Samples (ICS)

- 1. ICS must be analyzed according to the EPA method used, at the beginning and end of each analysis run but not before initial calibration verification and daily calibration check.
- 2. ICS solution must consist of the analytes mixed with the interferents.
- 3. The ICS results must fall within the control limit of +/- 20% of the true values for each analyte. If not, terminate analysis, take corrective actions, recheck the calibration and reanalyze the affected samples.



## California Regional Water Quality Control Board

#### Los Angeles Region

Over 51 Years Serving Coastal Los Angeles and Ventura Counties
Recipient of the 2001 Environmental Leadership Award from Keep California Beautiful



Arnold Schwarzenegger Governor

320 W. 4th Street, Suite 200, Los Angeles, California 90013 Phone (213) 576-6600 FAX (213) 576-6640 - Internet Address: http://www.swrcb.ca.gov/rwqcb4

May 14, 2004 Mr. Don Basinger FX-6 Personal Privacy

REQUEST FOR AN EXTENSION TO SUBMIT A TECHNICAL INVESTIGATION REPORT PURSUANT TO CALIFORNIA WATER CODE SECTION 13267 -- HAWKER PACIFIC INC. 11310 SHERMAN WAY, SUN VALLEY, CALIFORNIA (FILE NO. 111.0436)

Dear Mr. Basinger:

California Regional Water Quality Control Board, Los Angeles Region, ("Regional Board") staff have received your attorney's (Mr. Berger) letter dated April 19, 2004, requesting an extension to submit a technical report for soil assessment, as directed in our letter dated March 15, 2004.

This letter serves to formally grant you a 30-day extension. Thus the new due date for submitting the technical report (workplan) is now **June 15, 2004**. However, as provided in Section 13268 of the California Water Code, failure to submit the required technical report by the due date specified may result in administrative civil liability penalties being assessed by the Regional Board, in an amount up to one thousand dollars (\$1,000) per day for each day the technical report is not received. These penalties can be assessed by the Regional Board from the original due date of May 15, 2004.

If you have any questions regarding this matter, please call Mr. Alex Lapostol at (213) 576-6807 or Mr. Dixon Oriola at (213) 576-6803.

Sincerely,

Dand A. Buhnanshi, AED N Dennis A. Dickerson Executive Officer

cc: Mr. Norman B. Berger, Attorney

Mr. Brian S. Carr, Hawker Pacific, Inc.

Mr. Mark Mackowski, Upper Los Angeles River Area Watermaster

Mr. Roger Baker, City of Burbank Planning Department Mr. Fred Lantz, City of Burbank Water Supply Department

# WORK PLAN FOR AN HEXAVALENT CHROMIUM INVESTIGATION IN SHALLOW SOIL

Hawker Pacific Aerospace Facility Sun Valley, California

June 14, 2004

Prepared for: Hawker Pacific Aerospace

and

The Wagner and Basinger Trusts

Prepared by:

Shaw\* Shaw Environmental & Infrastructure, Inc.

3700 State Street, Suite 350 Santa Barbara, California 93105





## Shaw Environmental & Infrastructure, Inc.

June 14, 2004

Mr. Dixon Oriola California Regional Water Quality Control Board, Los Angeles Region 320 West 4<sup>th</sup> Street, Suite 200 Los Angeles, California 90013

Subject: Work Plan for Technical Investigation

Dear Mr. Oriola:

Enclosed with this letter is a work plan presenting Hawker Pacific Aerospace and the Wagner and Basinger Trusts' plan for conducting a subsurface environmental investigation at the Hawker Pacific Aerospace Sun Valley, California facility. The investigation is designed to evaluate whether or not elevated concentrations of hexavalent chromium are present in shallow soil underlying portions of the site where hexavalent chromium is (or was in the past) used or stored. This work plan has been prepared in response to a request from your Regional Board to the Wagner and Basinger Trusts in a letter from Dennis Dickerson, Executive Director, dated March 15, 2004. In a May 14, 2004 letter, the RWQCB extended the time for the Wagner and Basinger Trusts' response to June 15, 2004.

In accordance with the terms of Mr. Dickerson's letter, Hawker Pacific Aerospace and the Wagner and Basinger Trusts shall withhold implementation of this work plan until Regional Board staff has granted approval.

Sincerely,

James T. Wells, PhD, RG

Senior Consultant

Lorne Everett, PhD, DSc Senior Vice President,

Chief Scientist

Enclosure: Work Plan

## Certification

This document was prepared by Shaw Environmental & Infrastructure, Inc., under the professional direction and review of the registered professional listed below. The work described herein was prepared in accordance with generally accepted professional engineering and geologic practice. No other warranty exists, either expressed or implied.

James T. Wells, Ph.D.,

California Registered Geolog NO #72242

THOMAS WELLS

Date

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## Section 1. Introduction

#### A. Objectives of this Work Plan

The purpose of this document is to present Hawker Pacific Aerospace and the Wagner and Basinger Trusts' plan for conducting a subsurface environmental investigation at the Hawker Pacific Aerospace Sun Valley, California facility. The investigation is designed to evaluate whether or not elevated concentrations of hexavalent chromium are present in shallow soil underlying portions of the site where hexavalent chromium is (or was in the past) used or stored. This work plan has been prepared in response to a request from the California Regional Water Quality Control Board, Los Angeles Region (RWQCB) to the Wagner and Basinger Trusts in a letter dated March 15, 2004. In a May 14, 2004 letter, the RWQCB extended the time for the Wagner and Basinger Trusts' response to June 15, 2004. The Wagner and Basinger Trusts own the portion of the Hawker Pacific Aerospace site that is the subject of the proposed investigation.

#### **B.** Site Description

The Hawker Pacific Aerospace site is located on Sherman Way, near the Burbank Airport (Figure 1). Administrative offices are located at 11240 Sherman Way, although this investigation will focus on certain light industrial buildings located on an adjacent parcel at 11310 Sherman Way. Hawker Pacific Aerospace repairs and overhauls aircraft landing gears and hydraulic components.

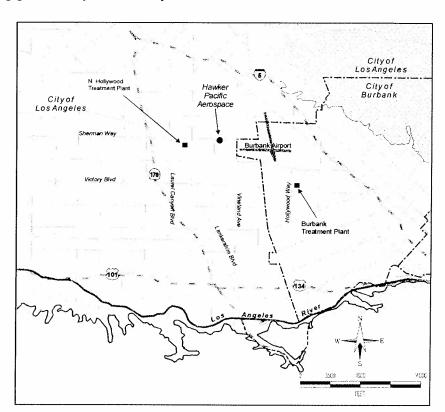


Figure 1
Site Location Map
Hawker Pacific Aerospace
Sun Valley, California

The repair and overhaul of landing gears has been the principal operation at the site since October 1966; although different business entities have operated at the site since that time. The Wagners and Basingers purchased the real property in May 1966, and Stellar Hydraulics commenced operations on the western

portion of the current site in October 1966. Stellar Hydraulics was purchased by Canoga Industries in August 1968, and Canoga Industries operated on the site until 1977. In 1977, Canoga Industries merged with Zero Corporation and the landing gear overhaul business continued under the Zero Corporation name. In 1979, Zero Corporation sold the Sherman Way operation to Bertea Corporation which—in turn—merged with Parker-Hannifin in 1980. Parker-Hannifin operated at the site until 1982 when Flight Accessory Services purchased the operation. In 1987, Hawker Pacific Aerospace purchased substantially all of the assets of the landing gear overhaul operation at the site and Hawker Pacific Aerospace operates at the site to this day. The current operation occupies eight buildings as shown on Figure 2.

#### C. Use of Heavy Metals at Hawker Pacific Aerospace

As part of the process of overhauling aircraft landing gears, Hawker Pacific Aerospace conducts plating operations involving chromium as well as other metals. No chromium spills or leaks have been reported at this site and no chromium subsurface investigations have been conducted in the past. Chromium for the plating operation is purchased and stored as solid chips. According to purchasing records, Hawker Pacific Aerospace's chromium usage in recent years has been as follows:

2003	10,400 pounds chromium trioxide chips
2002	9,400 Pounds chromium trioxide chips
2001	4,600 Pounds chromium trioxide chips

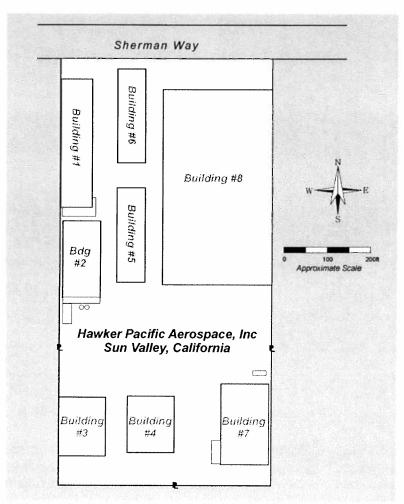


Figure 2
Facility Map
Hawker Pacific Aerospace
Sun Valley, California



Records for previous years and previous owners are not available. Because no spills or leaks have been reported at this site, logical sampling locations for this investigation consist of process areas (in particular, Building 2 where chromium plating operations are conducted) and all current or past chemical and waste storage locations.

Plating operations were first conducted at the site by Canoga Industries, starting in late 1968, and have always been located in Building 2. The plating tanks currently consist of (from south to north) a rinse water tank (previously used as an Iridite tank), a caustic solution tank, a nickel plating tank, a cadmium plating tank and four chromium plating tanks (Figure 3). These tanks are mounted in a 6-foot deep concrete pit which contains a small sump at its northwestern corner. Directly north of the plating tanks is a 5-stage clarifier which is no longer in use. The clarifier was connected to the City sewer line until 1994 when the connection was capped and cemented. Process wastewater is now piped to a closed-loop vacuum distillation unit located immediately south of Building 2 for treatment and recycling. Building 2 also contains the NITAL area which consists of seven tanks containing: iridite, nitric acid, hydrochloric acid, caustic solution and rinse water tanks.

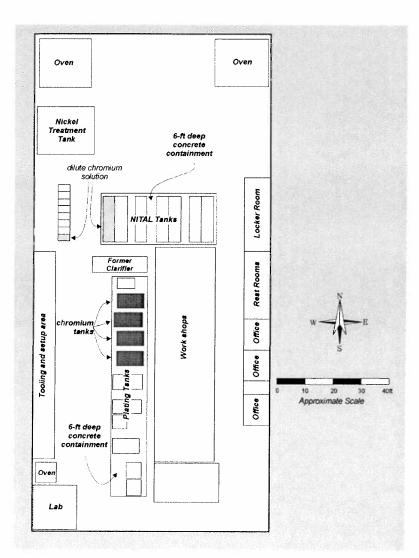


Figure 3
Building 2 Plating Operations
Hawker Pacific Aerospace
Sun Valley, California

340

Raw materials (including chromium trioxide chips in 100 lb. containers) are currently stored in the north end of Building 6 (Figure 4). Over the years, raw materials have been stored in two other areas at the site: the southern portion of Building 6 and outside the southern end of Building 5.

All liquid waste streams from the plating operation are treated in Hawker Pacific Aerospace's vacuum distillation unit. The only waste from this operation is a liquid concentrate which accumulates in a small tank in the treatment compound. The liquid concentrate is periodically emptied from the accumulation tank and transported under manifest to an offsite treatment and recycling facility.

## Section 2. Previous Environmental Work

Hawker Pacific Aerospace and the Wagner and Basinger Trusts have conducted a number of environmental investigations at the Sherman Way site. In response to a regulatory request (RWQCB, 1988) Hawker Pacific Aerospace conducted a series of investigations in 1988 and 1989 (Law Environmental, 1989a; 1989b, 1990a). These investigations focused on assessing the presence or absence of volatile organic compounds (VOCs) in soil underlying the site. Soil borings were advanced and soil samples were analyzed for VOCs at or near the chemical storage sheds, an above-ground trichloroethene (TCE) tank, an above-ground waste oil tank, a flammable liquid shed, two private septic systems, and the industrial waste clarifier. Upon review of data from these investigations, the RWQCB concluded that no further action was necessary at the site with respect to the Well Investigation Program (RWQCB, 1990).

In 1989, Hawker Pacific Aerospace personnel discovered a previously unknown 280-gallon underground storage tank (UST) and sump on the western edge of the property between Buildings 1 and 2. Hawker Pacific Aerospace notified RWQCB of this discovery by letter (Hawker Pacific Aerospace, 1989). In August 1990, Law Environmental conducted a soil investigation in the UST and sump area. Petroleum hydrocarbons and chlorinated compounds—principally tetrachloroethene (PCE)—were detected in a very limited zone of shallow soil and no PCE was detected deeper than 30 feet below ground surface (bgs). With representatives of the RWQCB and Los Angeles County Fire Department in attendance, the tank and sump were removed in August 1991 (Law Environmental, 1991).

In 1993 the US Environmental Protection Agency (USEPA) notified Hawker Pacific Aerospace that the agency considered it to be a potentially responsible party (PRP) for regional groundwater contamination in the San Fernando Valley (USEPA, 1993). USEPA demanded a large financial payment from Hawker Pacific Aerospace as its share of cleanup costs. While Hawker Pacific Aerospace negotiated this claim with the federal government, the RWQCB notified Hawker Pacific Aerospace that it was necessary to implement a soil vapor extraction program to mitigate VOC impacts to soil. Hawker Pacific Aerospace believed the soil vapor extraction program was unnecessary. In particular, data collected in the early 1990s showed that remaining impacts to shallow soil were small to nonexistent. For example, in June 1992, Law/Crandall, Inc. had collected soil samples while installing four vapor extraction wells (Law/Crandall, 1993). Similarly Geraghty & Miller collected soil samples in January 1994 in the vicinity of the former UST and sump. The results of both sampling efforts showed only scattered and low concentrations of VOCs (of the samples collected by Law, only one of eight contained PCE, at a concentration of 31 µg/kg; of the samples collected by Geraghty & Miller, none of 17 samples contained PCE).

Geraghty & Miller also conducted neutron logging at the site to a depth of approximately 84 feet bgs and analyzed soil samples for a suite of physical soil tests that showed—among other things—that the vadose zone is heterogeneous with continuous perched (saturated) zones in the vadose zone. This was a fundamental finding because it showed that barriers to vertical flow of both soil moisture and soil vapor exist in the subsurface that serve to minimize the risk of shallow soil impacts to the underlying groundwater.

In its March 1996 report to the RWQCB, Geraghty & Miller (1996a) summarized and interpreted the available subsurface data and concluded that PCE impacts to the soil consisted of a localized zone with low concentrations. Geraghty & Miller found that PCE concentrations in soil fell below cleanup thresholds for protection of groundwater quality (using the methodology promulgated in the RWQCB's 1995 Interim Guidance Document). Geraghty & Miller concluded that the vapor extraction program was not necessary and recommended that it not be implemented



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The RWQCB responded (RWQCB, 1996a) with a request for additional investigative work in the vicinity of the former UST and sump in order to confirm the limited extent of PCE in shallow soil. Geraghty & Miller submitted a work plan (Geraghty & Miller, 1996b) and conducted additional work in June 1996, consisting of soil sampling, soil vapor sampling and analysis of the organic carbon content in soil samples. Integrating this new data with existing information, Geraghty & Miller used RWQCB methodology (RWQCB, 1995) to recalculate the potential for groundwater impact from the minor occurrence of shallow soil contamination. The combination of low VOC concentrations, heterogeneous vadose zone lithology, and the great depth to groundwater (237.5 feet bgs in 1996 and nearly 300 feet bgs today) demonstrated the validity of Geraghty & Miller's earlier conclusion that the known soil impact at the Hawker Pacific Aerospace site did not constitute an unacceptable threat to groundwater quality. The RWQCB (1996b) concurred with this interpretation (essentially reaffirming its 1990 opinion) in a November 1996 letter: "we have no further requirements with respect to the Well Investigation Program for the subject site."

## Section 3. Proposed Work

#### A. Field Activities

This work plan calls for collection of soil samples at the Hawker Pacific Aerospace site in Sun Valley, California. As discussed in Section 1, sampling locations have been chosen based on the current or former existence of chrome plating operations and material or waste storage areas.

#### Health and Safety Considerations

The Health and Safety Plan (Appendix A) describes in detail the procedures for maintaining a safe workplace and precautions that are to be employed by Shaw personnel to protect against potential exposure to chemical and physical hazards. All field personnel will be required to review and sign the Health and Safety Plan prior to commencing work at the Site.

#### Soil Sampling

Soil sampling will be accomplished by advancing 11 soil borings: nine in areas related to chromium use or storage at the site and two at background locations as shown on Figure 4. Once this work plan is approved

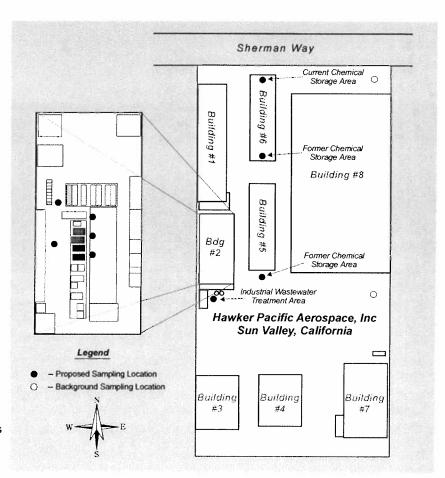


Figure 4
Proposed Soil Sampling Locations
Hawker Pacific Aerospace
Sun Valley, California

and the soil boring locations are marked at the site, Shaw will supply to the RWQCB the surveyed coordinates of each proposed boring and a site map with the soil boring locations in AutoCADD or GIS format, as required in the RWQCB's General Workplan Requirements for a Heavy Metal Soil Investigation. Five soil borings will be located adjacent to chrome plating operations in Building 2. This is an operating facility, with work being conducted 24 hours a day. Access is also limited by the presence of heavy equipment and established work areas. We will work with Hawker Pacific Aerospace to clear areas as close as possible to the plating tanks, although in some cases it may be necessary to shift the soil sampling locations to accommodate obstructions or access problems in the building. Three borings will be located in the chemical storage areas (one current storage area and two former areas: see Figure 4). One boring will be located directly adjacent to the industrial wastewater treatment system south of Building #2. Finally, the two background borings will be located near the eastern boundary of the Hawker Pacific Aerospace site, in locations remote from any known current or former chemical storage or handling areas.

Prior to beginning field activities, Shaw will attempt to identify underground utilities by reviewing available facility drawings and interviewing knowledgeable Hawker Pacific Aerospace employees. In addition, all boring locations will be marked with spray paint and Underground Services Alert will be notified of the intent to conduct subsurface investigations at the site.

Sample locations at concrete or asphalt-paved areas will require concrete coring to access the underlying soil. A concrete coring subcontractor will cut a 6-inch diameter core at each location. Soil borings will be advanced using a direct-push drilling system. Drilling and soil sampling will be conducted in accordance with Shaw's standard operating procedure for direct push drilling (Appendix B)

Very good lithologic information is available to a depth of approximately 80 feet from Geraghty & Miller's work in 1996. To supplement this data, we propose to collect continuous core samples from at least two of the boring locations proposed here. In accordance with the RWQCB's General Workplan Requirements for a Heavy Metal Soil Investigation soil samples from potential release areas will be collected at depths of approximately 1, 5, 10, 15, 20 and 25-feet bgs and at notable lithologic changes. Soil samples from background locations will be collected at depths of approximately 1 and 10-feet bgs. If significant lithologic heterogeneity is encountered, additional background samples may be collected to capture the natural compositional variability of metal concentrations in soils at this site. Soil samples will be collected at the desired intervals using a direct-push sampling device fitted with acetate sample sleeves.

Once the sleeve is extracted from the sampling device, it will be immediately capped with Teflon and a plastic cap, labeled and stored on ice in a cooler or a field refrigerator. The samples will be delivered on a daily basis to a State of California-certified analytical laboratory for analysis. Chain of custody records will be maintained from the time of collection through receipt of the samples by the laboratory. During sampling, a Shaw geologist will log soil profiles using the Unified Soil Classification System and samples will be screened using a photoionization detector.

The soil borings will be backfilled with Portland cement. The surface will be patched, if necessary, with concrete or asphalt to match surrounding grade.

#### Laboratory Analysis of Samples

All samples collected from background locations and the 1-foot and 10-foot samples from the locations related to chromium use or storage (plus any sample, regardless of depth that shows evidence of discoloration) will be immediately analyzed for metals, as specified below. All other samples will be held in storage by the laboratory. In the event results from the initial batch of samples indicate elevated levels of total or hexavalent chromium (determined by statistical comparison against the background results), we will then direct the laboratory to analyze all other samples from that location. In the event results from the initial



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batch of samples do not indicate elevated levels of total or hexavalent chromium, the deeper samples will not be analyzed and we will direct the laboratory to properly dispose of the soil. Soil samples will be analyzed for metals using EPA Method 6020. All California Title 22 metals will be quantified. Hexavalent chromium will be analyzed using EPA Method 7199 and mercury will be analyzed using EPA Method 245.5.

#### Quality Assurance/Quality Control

Internal quality control checks will be performed for the soil sampling and analytical procedures by collecting, analyzing, and evaluating field quality control samples. The laboratory will follow its own QA/QC program in compliance with it's state-approved Quality Assurance Plan. Field-based quality control procedures will include collection of the following data:

- Field rinsate blanks field equipment blanks will be collected using laboratory-provided water to assess the effectiveness of decontamination procedures (see below) for soil sampling equipment and to evaluate any potential cross contamination between soil samples. One field equipment blank will be collected for each day soil sampling is conducted and will be analyzed for the same analyses as soil samples.
- Field blank One sample of the laboratory-provided water used for the field equipment blanks will be analyzed to ensure that no analytes are present in the source water.
- Trip blanks trip blanks are used to identify any potential sample contamination during handling and transport to the analytical laboratory. The trip blanks will be provided by the laboratory and each day, at least one trip blank will accompany the cooler or coolers containing soil samples to be analyzed for VOCs.
- Temperature blanks temperature blanks are used to assess soil sample storage procedures and will accompany each soil sample cooler.

#### Decontamination of Field Equipment

Field equipment that comes into contact with soil will be properly decontaminated in accordance with Shaw's standard operating procedure for decontamination (Appendix B). For metals, an important component of decontamination procedures is to rinse equipment with an acid metal desorbing wash.

#### Soil and Ground Water Residuals Management

Investigation-derived soil and water wastes will be collected and placed in 55-gallon drums provided and labeled by Shaw. The wastes may include soil cuttings from direct push drilling and sampling, debris from concrete cutting and water from decontamination procedures. Because we will be using a direct push drilling technique, the volume of soil cuttings will be minimal (probably less than one drum). Each drum will be assigned a unique identification name or number and labeled "Pending Analysis". The results of the soil sampling will be used as a basis for the determining the ultimate disposition of the drum(s) of soil. It is anticipated that Hawker Pacific Aerospace will handle the wastewater derived during this investigation by processing it in the industrial wastewater treatment system operating at the site.

#### Documentation

Field activities will be documented in a variety of formats including field notebooks containing Shaw's observations of site conditions; field sampling and health and safety notes; calibration checks for field equipment; boring logs containing soil descriptions and photoionization screening results; chain-of-custody



forms which accompany the soil samples during transportation to the laboratory; and the field database documenting sampling depths and requested analyses.

### **B.** Site Investigation Report

Shaw will prepare a site investigation report detailing the results from the field activities described above. The report will follow, where applicable, RWQCB guidelines for site investigations. The report will include the following: a summary of past investigations at the site; the purpose and scope for this site investigation; a description of the field activities (including any deviations from this work plan); soil boring logs, tabulated results and figures showing sample locations and distribution of contaminants (if found). If results of this proposed investigation do not fully delineate the distribution of hexavalent chromium in the vadose zone, then the site investigation report will also contain a plan for additional work to better define the extent of soil impact.

## Section 4. Conclusions

This document presents Hawker Pacific Aerospace's and the Wagner and Basinger Trusts' sampling plan for conducting a subsurface environmental investigation at the Hawker Pacific Aerospace facility in Sun Valley, California. The investigation is designed to assess the presence or absence of elevated concentrations of hexavalent chromium in shallow soil underlying portions of the site where hexavalent chromium is (or was in the past) used or stored. This document fulfills a request from the California Regional Water Quality Control Board, Los Angeles Region (RWQCB) to the Wagner and Basinger Trusts in a letter dated March 15, 2004. No chromium spills or leaks have been reported at this site. Sampling locations for this investigation consist of process areas (in particular, Building 2 where chromium plating operations are conducted) and all current or past chemical and waste storage locations.

## References

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- Active Leak Testing, Inc., 1990, Underground Storage Tank Assessment, June 1990.
- California Regional Water Quality Control Board, Los Angeles Region, 1988, Letter from RWQCB to Hawker Pacific Aerospace requesting subsurface investigation for VOCs, September 6, 1988.
- California Regional Water Quality Control Board, Los Angeles Region, 1990, Letter from David Bacharowski (RWQCB) to Erik Johnson (Hawker Pacific Aerospace) informing Hawker Pacific Aerospace that no further action was necessary related to WIP, February 21, 1990.
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- California Regional Water Quality Control Board, Los Angeles Region, 1996b, Letter from RWQCB to Hawker Pacific Aerospace stating that there were no further requirements regarding VOCs at the site, November 1996.
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- Law Environmental, Inc., 1989a, Report of Subsurface Investigation, AB1803 Follow-up Program, January 4, 1989.
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- Law Environmental, Inc., 1990a, Report of Additional Subsurface Investigation, Private Sewage Disposal System and Industrial Waste Clarifier, January 11, 1990.
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- Law Environmental, Inc., 1992, Underground Storage Tank and Sump Removal, July 17, 1992.



Law/Crandall, Inc., 1993, Summary of Findings: Environmental Assessment Work, Hawker Pacific, 11310 Sherman Way, Sun Valley, California.

USEPA, 1993, Letter from US Environmental Protection Agency to Hawker Pacific Aerospace.

## APPENDIX A HEALTH AND SAFETY PLAN

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## Shaw Environmental & Infrastructure, Inc. Site-Specific Health & Safety Plan

for

Shallow Soil Investigation Hawker Pacific Aerospace 11310 Sherman Way, Sun Valley, California

Prepared by: James Wells	Date: June 4 2004
Revised by:	Date:
APPROVALS: The following signatures constitute approval of this Deviations from this Plan are not permitted without prior approval f	
Shaw Health & Safety Coordinator	Date
Site/Project Manager	Date

0

#### PRE-WORK HEALTH & SAFETY BRIEFING

I have attended a briefing on this Health & Safety Plan prior to the start of on-site work and declare that I understand and agree to follow the provisions and procedures set forth herein while working on this site.

Printed Name	Signature	Date
		, , , , , , , , , , , , , , , , , , ,

**NOTE:** This Site Health and Safety Plan provides only site-specific descriptions and work procedures. General safety and health compliance programs in support of this site plan, including safe work, training, medical monitoring, and recordkeeping practices, are described in the Corporate Health and Safety Program Manual and are hereby made part of this plan by reference. The manual is available to all employees and to outside parties by request.

#### 1.0 PROJECT INFORMATION

Name of Project: Shallow Soil Investigation at Hawker Pacific Aerospace	Project Number: 27238-000	
Location: 11310 Sherman Way, Sun Valley, Calif	ornia	
Client Contact: Erik Johnson Hawker Pacific Aerospace	Client Contact Phone: (818) 765-6201	
Alternate Client Contact: James Bennett Hawker Pacific Aerospace	Alternate Contact Phone: (818) 765-6201	
Shaw Project Manager: James Wells	Shaw PM Phone No.: (805) 569-9825	
Alternate Shaw Contact: Lorne Everett	Alternate Shaw Phone: (805) 569-9825	

#### SCOPE OF WORK:

Shaw Environmental will provide direction and oversight for the installation a shallow soil investigation at the Hawker Pacific Aerospace facility, located in Sun Valley, California. This work is designed to evaluate whether elevated levels of hexavalent chromium exist in shallow soil at this site. Soil samples will be collected to depths up to 25 feet below ground surface using direct push drilling methods. Up to 10 locations will be investigated, both inside and outside buildings. Approximately five samples per location will be collected, placed in appropriate containers and transported to a State certified laboratory for chemical analysis. Soil and decontamination water accumulated during this activity (if any) will be stored in drums on site pending laboratory analysis.

#### **Subcontractor**(s) to be involved in on-site activities:

Name	Work Activity	
Utility Locator	Location of subsurface utilities	
Drilling Company	Direct push soil borings and soil sampling	
State-Certified Laboratory	Analysis of soil samples	

Estimated Start Date: August, 2004

Projected Completion Date: September 2004

Estimated Number of Days to Complete Field Work: Two

#### 2.0 SITE DESCRIPTION

Check one of the following:

Site	X	Industrial	 Commercial	Other:
classification:				

**2.1 General Description:** (include site history/usage; type of facility; type of investigation; materials stored/used on site; whether paved or landscaped, etc.)

The Hawker Pacific Aerospace facility in Sun Valley, California consists of two contiguous parcels each with a different owner. The western parcel, which is the subject of this investigation, is owned by the Wagner and Basinger Trusts. The address of the western parcel is 11310 Sherman Way.

Hawker Pacific Aerospace overhauls and repairs airplane landing equipment at the Sun Valley facility.

#### Site Status (mark all that apply):

X	Active	Inactive
	Partially Active	Other:

#### Site history information sources used; check all that apply:

	City Directories	
	Geological References	State Files
	Previous report by H&A	Water Quality Maps
X	Previous report by others	Inquiries

Is a **site plan** or sketch available? Y X N If yes, attach a copy to this plan.

Indicate any unusual features at the site (power lines, variable terrain, etc.):

Many overhead utility lines cross the property. In the course of Hawker Pacific Aerospace's normal operations, there is a significant amount of forklift traffic, both inside buildings and in the roadways between buildings at the facility.

#### 2.2 Work Areas

The attached site plan shows locations of the proposed soil borings. The exact locations may be altered slightly during field work to accommodate Hawker Pacific's work activities and/or to minimize access problems for the drilling rig.

#### 3.0 PROJECT TASK BREAKDOWN

List and describe each distinct work task below:

Task No.	Task Description	Employee(s)	Work Date(s) or Duration
1	Utility Clearance	Chris Rohlfing*	<1 day
2	Oversee Drilling Subcontractor	Chris Rohlfing*	1-2 days
3	Soil Sampling	Chris Rohlfing*	1-2 days
4	Decontamination of Field Equipment	Chris Rohlfing*	1-2 days
5	Residuals Management	Chris Rohlfing*	1-2 days

<sup>\*</sup>or other qualified Shaw geologist

#### 4.0 HAZARD ASSESSMENT

#### 4.1 Chemical Hazards

Is chemical analysis data available? YX\* N

\*No metals analysis are available, however previous investigations have identified VOCs in shallow soil at this site.

Does chemical analysis data indicate that the site is contaminated? Y\_X\_N \_\_\_

Potential physical state of the hazardous materials at the site (mark all that apply):

	Gas/Vapor		Sludge
X	Liquid	X	Solid/Particulate

## Anticipated/actual class of compounds (mark all that apply):

	Asbestos	Inorganics	
	BTEX	Pesticides	
X	Chlorinated Solvents	Petroleum products	······································
X	Heavy Metals	Other:	******

#### Impacted environments (indicate all media in which contamination is expected):

	Air	Groundwater
X	Soil	Sediment
	Surface water	Other:

## **Estimated concentrations** of major chemicals expected to be encountered by onsite personnel:

Work Activity	Media	Chemical	Anticipated Concentration
Utility Clearance	SO	PCE, chromium	Minimal
Oversee Drilling Subcontractor	SO	PCE, chromium	Minimal
Soil Sampling	so	PCE, chromium	PCE: ND-130mg/kg chromium: unknown
Decontamination of Field Equipment	SO, W	PCE, chromium	PCE: ND-130mg/kg chromium: unknown
Residuals Management	so, w	PCE, chromium	PCE: ND-130mg/kg chromium: unknown

(Media key: A = Air; GW = Groundwater; W = Water; SO = Soil; SE = Sediment)

Other site (safety) concerns related to the chemicals present on this site: No others known.

#### 4.2 Physical Hazards

Is any site work area(s) to be entered for this project considered a confined space? Y\_N  $\underline{X}$  If yes, indicate which area(s) and why:

ALL CONFINED SPACE ENTRIES REQUIRE SPECIAL PROCEDURES, PERMITS AND TRAINING AND MUST BE APPROVED BY THE CORPORATE HEALTH & SAFETY MANAGER

#### **Physical Hazard Checklist**

Indicate all hazards that may be present for each task. If any of these potential hazards are checked, it is the project manager's responsibility to determine how to eliminate/minimize the hazard to protect onsite personnel. Note: Task numbers refer to those identified in section 3.

Hazards	Task	Task	Task	Task	Task
	1	2	3	4	5
Underground utilities	√	√			
Overhead utilities					
Excavations greater than 4' depth		√	<b>√</b>		
Heavy equipment	1		√		
Drilling hazards		<b>√</b>			
Noise (above 85 dBA)		√			
Traffic concerns	1	<b>√</b>	√	<b>√</b>	<b>√</b>
Extreme weather conditions					
Rough terrain for drilling					***
equipment					
Buried drums					
Heavy lifting (>50 lbs)					
High risk fire hazard					
Water hazards					
Lockout/Tagout					
requirements					
Other:					

### Describe any special precautions to be taken with respect to the hazards checked above:

#### **Underground Utilities:**

Prior to commencing drilling activities, Shaw will contact USA Dig Alert to check for the presence of subsurface utilities. The proposed drilling and sampling locations will be clearly marked with white paint. In addition Shaw will review available facility maps for evidence of any subsurface utility lines.

#### Overhead Utilities:

Prior to commencing drilling activities, an inspection of utilities in relation to the drilling rig will be evaluated. Drilling rigs will not be placed closer to 15-feet from overhead utility lines.

#### Heavy Equipment:

Only certified personnel will operate heavy equipment. Designated workstations will be set up away from the heavy equipment traffic. Equipment emergency shut off switches will be identified to all personnel working at the site and caution tape will be placed around work areas to warn field personnel and bystanders.

#### Drilling Hazards:

Only qualified and trained personnel will operate the drilling rig. Hands, shovels and loose clothing will be kept at a safe distance when the augers are spinning. Emergency

shut off switches will be pointed out to all personnel working on the site. Only the assigned drilling crew and on-site geologists will be allowed at the rear of the drilling rig. Caution tape identifying the workspace will placed around the rear of the drilling rig to keep unnecessary people away from the drilling hazards. Hard hats, steel toed boots, and ANSI approved safety glasses must be worn at all times when the drilling rig is operating.

#### Hearing (above 85 dBA):

All personnel working in the designated work area behind the drill rig when the drilling rig is operational or measured readings exceed 85 dBA will wear hearing protection. Hearing protection includes earplugs and/or muffs, which can lower the work area decibels (dBA) approximately 25 to 30 dBA.

#### 5.0 PROTECTIVE MEASURES

### 5.1 Personal Protective Equipment (PPE) Requirements

#### **Required PPE** Task Task Task Task Task 1 2 3 4 5 Hard hat √ Safety glasses w/side shields Steel-toe footwear √ Hearing protection Tyvek ™ coveralls PE-coated Tyvek™ coveralls Boots, chemical resistant Boot covers, disposable Leather work gloves Inner gloves -√ √ Outer gloves - Nitrile Tape all wrist/ankle interfaces Half-face respirator Full-face respirator Organic vapor cartridges Acid gas cartridges Other cartridges: P-100 (HEPA) filters Face shield Traffic Vest Level of protection

D

#### **PPE Checklist**

#### 5.2 Personal Hygiene Safeguards

required:

Every site workers who comes in contact with soil must wash his or her hands before eating drinking or smoking or when leaving each work area. Hand washing facilities (soap, potable

D

D

D

D

water and towels) will be available at the work site. Potable drinking water, stationed on a support vehicle, will be provided near each workstation.

No disposable PPE will be used more than one day. New disposable PPE will be issued daily. If cartridges are used for respirators, they must be discarded daily and new ones issued daily. Disposable PPE will be discarded into a waste container.

If sanitary facilities are not available on site, portable sanitary facilities will be brought to the site.

Location of decontamination station: A decon station will be set up at the perimeter of each work (drilling) location, just outside the exclusion zone (barrier tape)

#### 5.3 Site Safety Equipment

Check all items that are required to be on site:

$\sqrt{}$	Fire extinguisher	V	First aid kit	√	Flashlight
	Air horn/Signaling device	√	Cellular phone		Duct tape
	Ladder	1	Barricade tape		Drum dolly
	Personal flotation devices	1	Safety cones		Harness/Lanyard
	Other, specify:	· · · · · · · · · · · · · · · · · · ·		······	

#### 5.4 Site Security & Work Area Controls

Access to each contaminated work area will be controlled during on-site activities as follows: Safety cones or delineators and barricade tape will be used to establish the work zones.

Can site access during non-work hours be controlled by a perimeter fence or similar means?

Y \_√\_\_ N \_\_\_

If not, how will the site/work area be controlled during non-work hours to prevent access by unauthorized persons?

#### 6.0 MONITORING PLAN AND EQUIPMENT

Is air/exposure monitoring required at this work site for personal protection? Y \_ N \_ \lambda\_

Is **perimeter monitoring** required for community protection? Y  $\_$  N  $\checkmark$ 

Monitoring/Screening equipment required to be on site:

HNu analyzer (PID)	10.2e V	11.7eV	Combustible Gas Indicator (CGI) (LEL)
Organic vapor monitor	(FID)		Multiple Gas Detector - LEL/O <sub>2</sub> /H <sub>2</sub> S/CO
 ✓ Photovac Micro Tip, 10.6eV		Dust/Aerosol/Fiber count monitor	
Photovac GC		Colorimetric tubes; Specify:	
Other:			

**Standard action levels and required responses** for readings obtained with a multiple gas detector or an individual monitoring instrument are listed below. Do not deviate from these guidelines unless granted specific approval from the Corporate Health and Safety Manager.

Instrument	Normal	Operating levels	Action levels – required responses
Oxygen Meter	20.9%	Between 19.5- 23.5%	Below 19.5 %: leave area, requires supplied air Above 23.5%: leave area, fire hazard
CGI	0%	Less than 10%	Greater than 10%: fire/explosion hazard; cease work
Hydrogen Sulfide	0%	Less than 10 ppm.	Greater than 15 ppm (or 10 ppm for 8 hrs) requires supplied air respirator (SAR)
Carbon <b>M</b> onoxide	0%	Less than 25 ppm	Greater than 200 ppm for 1 hour or 25 ppm for 8 hrs requires SAR

## Description of Monitoring Requirements (include frequency and location by Task):

Monitoring Plan for Task Number(s): 2-3 Frequency: 3-4 times per Ho	ur
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#### **Drilling and Soil Sampling:**

Worker breathing zones will be monitored 3 to 4 times per hour when the drilling rig is operational. If odors are present, additional monitoring may be necessary.

#### 7.0 DECONTAMINATION

#### 7.1 Personnel Decontamination

Are **decontamination procedures** required for personnel working on site? Y \_X\_ N \_\_\_\_ If yes, describe steps:

Every site workers who comes in contact with soil must wash his or her hands before eating drinking or smoking or when leaving each work area. Hand washing facilities (soap, potable water and towels) must be available. Potable drinking water, stationed on a support vehicle, will be provided near each workstation.

#### Location of decontamination station:

Location of decontamination station: A decon station will be set up at the perimeter of each work (drilling) location, just outside the exclusion zone (barrier tape)

#### Disposal of PPE:

Disposable PPE will be discarded into a waste container and new PPE will be issued at least daily.

#### 7.2 Tools & Equipment Decontamination

Check all **equipment and materials needed for decontamination** of tools and other equipment:

	Acetone	$\sqrt{}$	Distilled water	- √	Poly sheeting		
√	Alconox soap	1	Drums for water		Steam cleaner		
√	Brushes		Hexane		Tap water		
$\sqrt{}$	Disposal bags		Methanol	√	Buckets		
$\sqrt{}$	Other, specify: metal-	desorbing	acid wash		· · · · · · · · · · · · · · · · · · ·		

#### Outline the equipment decontamination procedures for this project:

- 1. Contractors are responsible to decon their own equipment.
- 2. Soil and groundwater sampling equipment will be decontaminated between each sample collection. Soil sampling equipment will be decontaminated with a triple rinse procedure. The first rinse will include an Alconox and tap-water solution, followed by a tap-water rinse followed by a distilled or de-ionized rinse.
- 1. Prior to leaving the work zone, personnel handling equipment, soils or groundwater will be required to wash their hands with soap and water.

**Disposal methods for used decontamination material** (e.g., wash water, rags, brushes, poly sheeting) will consist of:

Decontamination equipment will be disposed of in plastic bags. Wash water accumulated during decon will be containerized in 55-gallon drums and label for temporary on-site storage until profiled and disposed of in facility's industrial wastewater treatment facility.

#### 8.0 CONTINGENCY PLAN

#### **EMERGENCY RESPONSE RESOURCES**

Nearest Hospital: (see attached map) Address:	Northridge Hospital & Medical Center-Van Nuys 14500 Sherman Cir
(see attached map) Address.	Los Angeles, CA
Phone Number:	(818) 997-0101
Emergency Response Number:	911
Local Emergency Response Number	Not applicable
(if not on 911 system):	
Other Ambulance, Fire, Police, or	
Environmental Emergency	CHEMTREC
Resources:	(800) 424-9300
Shaw Project Manager:	James Wells
Phone Number:	(805) 569-9825
Emergency Phone Number:	(805) 570-0267
Client Contact:	Erik Johnson
Phone Number:	(818)-765-6201
Emergency Phone Number:	
Other Entity:	
Address:	Not applicable
Phone Number:	

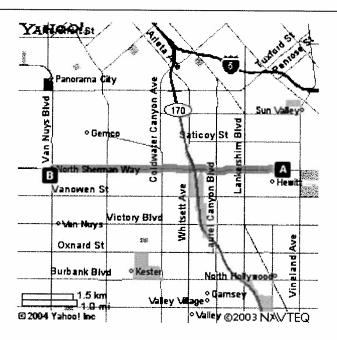
**Evacuation alarms** and/or emergency information be communicated among personnel on site by the following means: \_X\_ Verbal communication. If communication will be by other means, describe:

**Emergency services will be summoned:** \_X\_ Via on-site phone. If contact will be by other means, describe:

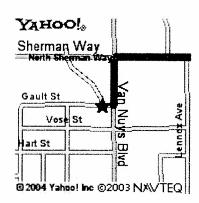
27.

#### The site evacuation plan is as follows:

In the event the work area needs to be evacuated, all field employees and subcontractors are to meet at the entrance to the facility on the sidewalk of Sherman Way or farther down the street if necessary to remain upwind from any potential vapors.



#### Hospital Location Map



# APPENDIX B STANDARD OPERATING PROCEDURES



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# SOP T-GS-021 Standards for Conducting Direct Push Drilling and Soil Sampling

Prepared By:		Date:	
	Dan Wynne, R.G., C.E.G., C.H.G. Sr. Technical Consultant		
Authorized By:	<u> </u>	Date:	
	John E. Sciacca, R.G. Geosciences Discipline Lead		



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## STANDARD OPERATING PROCEDURE

Subject: Standards for Conducting Direct Push Drilling and Soil Sampling

#### 1. PURPOSE

This procedure provides the standard practice for direct push drilling and soil sampling. The procedure provides the minimum required steps and quality checks that employees and subcontractors are to follow when performing the subject task.

This procedure may also contain guidance for recommended or suggested practice that is based upon collective professional experience. Recommended or suggested practice goes beyond the minimum requirements of the procedure and should be implemented when appropriate.

#### 2. SCOPE AND RELATED STANDARDS

Geosciences Standard Operating Procedure (SOP) T-GS-021 describes standards for direct push drilling and soil sampling, and discusses how such drilling and sampling will be conducted and documented for projects executed by Shaw Environmental & Infrastrucure Inc. (Shaw E & I). Responsibilities of individuals performing the work are also detailed. Additional project-specific requirements for direct push drilling and soil sampling may be developed, as necessary, to supplement this procedure and to address project-specific conditions and/or objectives.

This SOP covers requirements for collection of soil and unconsolidated materials by direct push methods primarily for laboratory or other testing and for lithologic description or analysis (logging). It describes basic equipment and procedures and addresses aspects of the process where quality must be maintained. It does not address procedures for specific brands of equipment, or for uncommon purposes of boring or sampling. Other types of soil and rock sampling while drilling are addressed in other Shaw E & I technical SOPs.

#### 3. REFERENCES (STANDARD INDUSTRY PRACTICES)

The methodology for direct push drilling and soil sampling should follow industry standard practices. The following references are relevant and useful for planning and conducting direct push drilling and soil sampling:

ASTM D 6282-98 Direct Push Soil Sampling for Environmental Site Characterizations

ASTM D 6286-98 Standard Guide for Selection of Drilling Methods for Environmental Site

Characterization

#### 4. **DEFINITIONS**

The following definitions are applicable to direct push drilling and soil sampling and this SOP.

- Direct push drilling—The creation of a boring by the displacement of soil without cutting or grinding and without the production of mechanically-altered soil (cuttings) at the ground surface. In direct push drilling, soil is displaced, primarily laterally, as a pipe or rod is forced vertically downward, creating a cylindric space (i.e. a boring). Energy to create the boring may be generated from constant pressure (e.g., hydraulically-powered), vibration, or other means.
- **Slough**—Slough is soil or other earth material that has been dislodged from its original location within the boring and displaced elsewhere within the boring (usually to the bottom). The creation



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and sampling of slough should be avoided, because slough has disturbed properties and is typically of uncertain origin with respect to depth. The presence of slough also impedes proper abandonment of borings.

- Conductor Casing—Conductor casing is drill pipe that is extended down into the ground as a boring is advanced, to prevent sidewall material from falling into the borehole and covering the inplace soil material that constitutes the bottom of the boring. Conductor casing is usually removed when a borehole is being abandoned.
- Sample—A mass of soil or earthen material that has been removed from the boring from a known depth, has had little internal disturbance, and may be considered representative of the insitu earthen material from a known depth and representative with respect to the intended tests or properties of interest.

#### 5. RESPONSIBILITIES

#### 5.1 Procedure Responsibility

The Geosciences Discipline Lead is responsible for the development, maintenance, and revision of this procedure. Any questions, comments, or suggestions regarding this technical SOP should be sent to the Geosciences Discipline Lead. The Geosciences Discipline Lead's location and associated contact information can be found on the Insider.

#### 5.2 Project Responsibility

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Employees planning or conduction direct push drilling and soil sampling, or any portion thereof, are responsible for meeting the requirements of this procedure. Employees conducting technical review or oversight of direct push drilling and soil sampling are also responsible for following appropriate portions of this SOP.

For those projects where direct push drilling and soil sampling activities are conducted, the project manager or designee is responsible for ensuring that drilling and sampling activities are conducted in accordance with this and other appropriate procedures. Project participants are responsible for recording information in sufficient detail to provide objective documentation (i.e., field notes, logs, forms, reports, etc.) that the requirements of this SOP have been met. Such documentation shall be retained as project records.

#### 6. PROCEDURES (TECHNICAL REQUIREMENTS)

This section addresses basic requirements and procedures involved with direct push drilling and soil sampling. This section includes information on selection of methods and equipment, planning and preparation requirements, health and safety requirements, drilling and sampling procedures, and key practices for ensuring quality.

Proper drilling and subsurface soil sampling procedures are necessary to ensure the quality and integrity of the samples. The details within this SOP should be used in conjunction with project-specific work plans. The project work plans should generally provide the following information:

- Specific direct push drilling and soil sampling methodologies and equipment to be employed
- Sample collection objectives
- Anticipated locations and total depths of soil borings and target horizons or depths of soil samples to be collected
- Numbers and volumes of samples to be collected



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- Types of chemical analyses to be conducted for the samples
- Specific quality control (QC) procedures and sampling requirements
- Detailed direct push drilling and subsurface soil sampling requirements or procedures based upon site-specific conditions and project-specific objectives/requirements

#### 6.1 Selection of Methods and Equipment

The practice of direct push drilling and soil sampling involves numerous variations in methodology and types of equipment. There are few industry-wide standards for direct push drilling and soil boring. Key aspects of the variations in direct push drilling and sampling are as follows:

- The use of single-wall or dual-wall sampling systems. Single-wall systems generally provide lower-quality sampling and higher rates of production than dual-wall systems. Single-wall systems can typically be advanced with lower energy sources (i.e., to greater depth) than dual-wall systems because they have smaller area and hence encounter less sidewall friction and tip resistance during advance.
- Open-hole or cased boring. This SOP recommends that borings always be advanced through or with a conductor casing.
- Open-barrel or closed (sealed)-barrel sampler. Open-barrel samplers are open at the bottom at all times, and may fill with slough, lose sample material as they are retrieved, or contribute or be subject to cross-contamination. Closed-barrel samplers are closed at the bottom until being mechanically opened at a target depth. Closed-barrel samplers reduce the potential for sampling of slough or cross-contamination of the sample.
- Liner or inner-barrel material. Inner barrel/sampler tubes should be selected based on the need to see or access samples for lithologic evaluation and the need to perform chemical or other analytical testing. Use of lexan or other see-through materials can be beneficial in identifying soil type or visual indications of contamination (such as petroleum saturation). Some liners, such as lexan, can be quickly cut to select certain sample intervals for testing, and the sample may be retained, shipped and stored directly in the liner. Liners or sample barrel material should generally not be made of materials that include any of the chemical species that are sought during analysis.
- Energy source for making the boring. Energy sources may be static or dynamic, and may include vibratory or sonic systems, hydraulic systems, percussion (hammer) systems, or even rotational systems.
- Energy source for removing the sampler. Energy sources may be static or dynamic, and are generally one of the following: hydraulically-lifted rod systems, winch and wire rope systems, or percussive systems (backpounding). This SOP recommends against backpounding as a means of removing samplers, as it tends to disturb samples.
- Use of checkball or open-top tubes for collection of soil. Checkball systems prevent fluids that are within the sampling barrel, above the sample, from flowing down into the barrel as the sampler is retrieved. Checkball systems are mostly used when sampling granular soils beneath the water table, to minimize the potential for water to dislodge or alter sample material as the barrel is retrieved.
- Use of catchers or retainers. Catchers are used to help retain loose soils within the sampling barrel as it is retrieved. Catchers are most commonly used when sampling granular soils beneath the water table, with variable success.



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#### 6.2 Planning and Preparation

Planning for direct push drilling and soil sampling activities involves the following:

- Identifying drilling and sample collection objectives and exact methodologies and equipment to be used for sample collection.
- Identifying specific drilling and sampling locations, targeted depths, and specific identification numbers of soil samples to be collected.
- Identifying numbers and volumes of samples to be collected.
- Specifying types of chemical analyses to be conducted for the samples.
- Listing specific quality control (QC) procedures and sampling requirements.
- Describing any detailed project-specific sampling requirements or procedures beyond those covered in this SOP, as necessary.
- Listing expected soil types, hydrostratigraphy, and/or formations to be encountered (if known).
- Identifying and listing all pertinent health and safety issues and requirements, including those contained in the project-specific health and safety plan(s), relative to work activities (including site utility clearance).
- Compiling main subcontractor requirements for direct push drilling and soil sampling and generating of the statement of work to procure subcontractor services.

All of the above information and items should be compiled as part of a sampling plan contained within the project work plans. This plan includes detailed, project-specific direct push drilling and soil sampling procedures beyond the basic procedures and requirements in this SOP.

Preparation for direct push drilling and soil sampling activities includes the following:

- Securing all necessary site access, permitting, and plan approvals.
- Procuring the appropriate direct push drilling and sampling subcontractor.
- Completing all necessary underground utility clearance activities at each of the sampling locations; each location should be cleared according to requirements in appropriate Shaw E & I technical SOPs and the project work plans.
- Briefing the rig geologist, subcontractor personnel, and other site personnel on specific information necessary for effective implementation of the sampling effort (e.g., sampling objectives, locations and depths, project-specific sampling requirements and procedures, pertinent health and safety requirements, etc.).
- Verifying that job personnel have proper health and safety training.

The project manager, or designee, is responsible for appropriately briefing field personnel, as described above.

#### 6.3 Health and Safety Requirements

Prior to initiating drilling and sampling activities, applicable Shaw E & I and project-specific safety requirements must be reviewed by Shaw E & I site personnel and subcontractors. This review is conducted to familiarize these individuals with specific hazards associated with the site and drilling activities, as well as with health and safety procedures associated with the operation and maintenance of drilling equipment. Such information may be found in the project health and safety



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plan and other applicable Shaw E & I policies and procedures, such as HS316 "Drilling Operations." Additional health and safety requirements include the following:

- Tailgate Safety Meetings should be held in the manner and frequency stated in the project health and safety plan. All Shaw E & I and subcontractor personnel at the site should have appropriate training and qualifications as per the project health and safety plan. Documentation should be kept readily available in the project files on site.
- During drilling, all personnel within the exclusion zone should pay close attention to all rig
  operations. Pushed or driven drill tools can catch or snag loose clothing, causing serious injury.
- Clear communication signals must be established with the drilling crew, since verbal communication may not be heard during the drilling process.
- The entire crew should be made aware to inform the rig geologist when any unforeseen hazard arises or when anyone is approaching the exclusion zone.

#### 6.4 Drilling and Sampling Requirements/Procedures

This SOP cannot present a single, detailed and specific procedure that is applicable to all methods and equipment that are available (Section 6.1) or to the specific sampling objectives of a specific project. An example procedure for direct push drilling and soil sample collection is shown in Attachment 1 (Section 7). The example procedure may be supplemented or customized to provide project-specific requirements and procedures.

Sample quality is easily compromised by poorly selected or haphazard drilling and sampling technique. Common problems and suggested solutions include the following:

- Generation of excess slough. Excess sloughing occurs when conductor casing is not used, when soil materials fall out of the sample barrel as it is retrieved, and when soil at or near the ground surface falls into the boring. Slough is excess when the amount that is present hinders the collection of sufficient representative sample volume or mass for the required testing or lithologic analysis.
- Collection of slough for testing or logging. This occurs when a large volume of slough is present
  in the boring bottom at the time the sampler is emplaced and driven into soil. Because slough is
  disturbed and from unknown depth, it is unsuitable for logging or testing.
- Disturbance (negatively-biasing) of samples for analysis of Volatile Organic Compounds (VOCs). The act of driving a sampling tube into soil causes compression and some heating of the soil, and can create macroscopic void space, i.e., a microannulus between the soil and sampling tube. Heating, compression of soil, and creation of void space contribute to the migration of gaseous fluids as well as the partitioning of VOCs, such as gasoline or solvent vapors. Although some heating, compression, and formation of microannular space are unavoidable, care should be taken to minimize these phenomena to the extent that is reasonably possible. Some sampling devices and methods are more suitable for analysis of samples for VOCs than others.
- Improper abandonment of borings. Excess slough or caving (the dislodgement and falling of a significant volume of sidewall material) hinders the proper abandonment of a boring. Where this occurs, the borehole should be cleaned out prior to grouting. A tremmie pipe should be used to conduct grout to the bottom of the borehole if a conductor casing is not in place prior to and during grouting.

Additional key practices that will ensure the quality of the samples collected and proper/efficient abandonment of the borings, include the following:

 Drill with a Conductor Casing. Various equipment, systems, and methods exist for direct push drilling and soil sampling. Some systems are open-hole (i.e., do not use conductor casing), hence borings made with these systems are at high risk for slough-related difficulties in logging,



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sampling, and abandonment. Most systems have provisions for driving down a conductor casing, to keep the boring open and relatively free of slough when the sampler or a plug or drive-point is not present at the bottom of the casing system. This SOP recommends the use of a method of direct push drilling that integrally includes the advancement of conductor casing as the boring is made, and further recommends that the conductor casing remain in place during sampling and into the abandonment process.

- Measure the Boring Depth. A weighted tape should be used to verify the depth of the boring within the conductor casing. Measurement should be made with reference to the ground surface. It is important to measure depth at the start of sampling intervals and at total depth (TD) of the boring.
- Clean-Out Excessive Slough. If slough is present, it should be removed by forcing a sampler into it and retrieving and emptying the sampler of slough.
- Identify Slough and Avoid Sampling it or Logging It as In Situ Material. Slough is generally easy to identify based on jumbled internal textures, lighter density, macroscopic and unmineralized void spaces, greater softness and malleability, and decreased cohesion, as compared to in situ material that has not been dislodged prior to the sampling process.
- Grout Through a Conductor Casing. Grouting through a conductor casing prevents any significant accumulation of slough in the boring and ensures that grout will be the predominant material in the borehole, thereby minimizing any potential for vertical migration of fluids in the filled borespace. This minimizes potential liability.

#### 6.5 **Documentation**

Accurate documentation of the boring, sampling, and abandonment activities is important for interpreting sample results, interpreting boring conditions and lithologic information, and conceptually reconstructing events. Appropriate forms (including boring logs) should be completed as per appropriate Shaw E & I technical SOPs and project-specific requirements/procedures.

#### 6.6 **Technical Review**

All direct push drilling and soil sampling specifications, procedures, and results (e.g., reports, forms, etc.) should undergo technical review. It is recommended that the technical reviewer also provide review/oversight of the actual field implementation of direct push drilling and soil sampling activities. This should include aiding in troubleshooting drilling and sampling problems. The technical reviewer should be an experienced senior geologist or hydrogeologist. At a minimum, the technical reviewer should be a person capable of planning and supervising direct push drilling and associated sampling and well installation programs. Individuals needing assistance in finding qualified technical reviewers may consult internal Shaw technical listings for experts in drilling or direct push drilling and sampling.

Any issues raised during the technical review shall be resolved between the reviewer and the staff planning, conducting, or preparing results of direct push drilling and soil sampling activities, as follows:

- Comments/issues raised relative to planning and developing detailed procedures for direct push drilling and soil sampling should be resolved before mobilization and drilling commences.
- Comments/issues raised relative to the results of drilling and sampling activities should be resolved before external (i.e., outside of Shaw E & I) use or submission of the results.

The technical review comments and issues, and corresponding resolution, shall be documented and filed with the project records. Such records should be maintained until project closeout.



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#### 7. ATTACHMENTS

Attachment 1, Example Direct Push Drilling and Soil Sampling Procedure.

#### 8. FORMS

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None.



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Procedure No. Revision No. Date of Revision Last Review Date Page SOP T-GS-021 0 8/07/03

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#### Attachment 1

#### **Example Direct Push Drilling and Soil Sampling Procedure**

The following procedure is provided as an example. It should be customized based on project/site-specific equipment, methodology, and sampling and quality control requirements. This procedure is written for a direct push drilling rig that uses a small diameter conductor casing with a three-foot long inner wireline sample barrel (with a three-foot long acrylic liner) connected to the bottom of the casing. The casing and associated sample barrel are driven, pushed, or vibrated into the ground in three-foot increments. Soil samples are collected into the acrylic sample tubes as the conductor casing and sample barrel are advanced into the formation. The samples inside the liner and sample barrel are then retrieved with a wireline, leaving the conductor casing in place. Soil samples are thus continuously collected until the total depth of the boring is reached. The example procedure consists of the following:

- 1. Decontaminate the direct push sampling rig and associated sampling equipment before mobilizing to the first sample location, in accordance with applicable Shaw E & I technical SOPs and/or project-specific requirements/procedures.
- 2. Inspect the direct push rig to make sure the equipment is properly maintained, adequately decontaminated, and determined capable of achieving the objectives for drilling (equipment advancement), sample collection, and abandonment of the boring (to be done by the driller and rig geologist).
- Calibrate all field analytical and health and safety monitoring equipment according to the instrument manufacturer's specifications and/or project work plans. Calibration results must be recorded on the appropriate form(s) as specified by the project work plans or health and safety plan.
- 4. Wear the appropriate personal protective equipment, as specified in the project work plans or health and safety plan. Personal protection will typically include, at a minimum, a hard hat, safety glasses, gloves, steel-toed boots, hearing protection, and coveralls.
- 5. Remove the surface cover (e.g., concrete, asphalt, etc.) at the drilling/sampling location according to the project work plans.
- 6. Once the direct push rig is sited at the sampling location, make sure the location is reasonably free of underground utilities, as per the project work plans. Manually probe or excavate near-surface soils (as required) as an additional step to avoid underground utilities or structures.
- 7. Learn the drilling equipment heights and dimensions necessary to independently determine the boring or sampler depth while observing the work (to be done by the rig geologist). Such information includes lengths of rods, casing, barrels, and other in-ground equipment; the length of strokes or advances; and the height from ground surface to "full down" stroke of the direct push rig.
- 8. Between each sampling location and prior to each sampling run, decontaminate the sampling equipment according to applicable Shaw E & I technical SOPs and/or project-specific procedures.
- 9. Inform the driller of the expected total depth, the first and expected additional sampling depths, the likelihood of encountering groundwater or NAPL, and any contingency or opportunistic decisions that are anticipated (such as contingency-sampling or increased total depth).
- 10. Record the type of sampler assembly on the appropriate form(s) as specified in appropriate Shaw E & I technical SOPs or the project work plans. To minimize off-gassing of volatiles, the sampler should not be advanced/pushed until the sampling team is ready to process the sample.
- 11. Commence drilling and sample collection by advancing the conductor casing and associated sample barrel (with liner) for the first three-foot increment.



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- 12. Pull the wireline sampling string up from the bottom of the borehole and remove the sample barrel. Make sure that each sample barrel is retrieved as quickly and smoothly as possible. Record the depth interval for each sample drive as the sample barrel is being retrieved.
- 13. Remove the acrylic liner containing the soil sample from the sample barrel.
- 14. Observe and record the amount of sample recovery on the appropriate form(s), according to applicable Shaw E & I procedures and/or the project work plans. Any observed field problems associated with the sampling attempt (e.g., refusal) or lack of recovery should be noted on the appropriate form.
- 15. Select the appropriate portion of the liner containing the sample to be cut and be submitted for laboratory analysis. Such selection should be based on the following factors: (1) judgment that the sample represents relatively undisturbed intact material, not slough; (2) volume/length of sample required for analysis; (3) minimal exposure to air; (4) lithology; and (5) obvious evidence of contamination. The project work plans should specify the volume/length of sample to be submitted for specific analyses and confirm the selection factor(s).
- 16. Place Teflon™ film over each end of the liner containing the samples to be submitted for chemical analysis and seal each end with plastic end caps. Do not use any type of tape to seal the cap, because tape causes a toluene interference. All samples should be individually stored in resealable plastic bags. Note: Additional project-specific sample preparation steps or modifications may be required as stated in the project work plans.
- 17. Appropriately label and number each sample to be submitted for analysis as per applicable Shaw E & I technical SOPs and the project work plans. The label will be filled out using waterproof ink and may contain, at a minimum, the following information:
  - Project number

Y

- Boring number
- Sample number
- Bottom depth of sleeve
- Date and time of sample collection
- Parameters of analysis
- Sampler's initials
- 18. Document the sampling event on the appropriate form(s), as specified in the project work plans. The information listed on the form(s) should, at a minimum, include the following:
  - Project name and number
  - Date and time of the sampling event
  - Sampling methods used specify sample type
  - Sample number
  - Sample location
  - Sample depth interval
  - Sample description (type of matrix)
  - Weather conditions



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- Unusual events, including lack of water or insufficient water volume in sampler
- Signature or initials of sampler
- 19. Appropriately preserve, package, handle, and ship the sample in accordance with applicable Shaw E & I technical SOPs and/or project-specific procedures. The samples shall also be maintained under custody. Samples stored on site will be subject to the provisions of applicable Shaw E & I procedures and/or project requirements. All reasonable attempts should be made to ship samples on the date they are collected.
- 20. Cut/split the remaining acrylic liner to expose the remaining soils for logging. The descriptions of the soil and preparation of a boring log should follow applicable Shaw E & I technical SOPs and project-specific requirements/procedures. The soil boring log should include the following information:
  - Borehole location
  - Name of the drilling company and driller
  - Dates and times when drilling began and when it was completed
  - Lithologic data and descriptions from soil samples
  - Sampling depths and recovery of soil samples
- 21. Continue to advance the borehole in three-foot increments and collect soil samples to the total depth. As the borehole is advanced, the rig geologist will generally do the following:
  - Observe and monitor rig operations
  - Conduct all health and safety monitoring and sampling and supervise health and safety compliance
  - Prepare a boring log from cuttings or soil samples as per applicable Shaw E & I technical SOPs and project-specific requirements
  - Document drilling progress and other appropriate observations on appropriate forms
  - Supervise the collection and preparation of any soil, soil vapor, or groundwater samples

The rig geologist should not leave the drill site while drilling operations are being conducted and the borehole is being advanced.

- 22. As drilling progresses, the rig geologist should observe and be in frequent communication with the driller regarding drilling operations. Conditions noted should include relative rates of penetration, flowing sands, drilling refusal, changes in equipment, etc. These conditions should be recorded on the appropriate logs and forms as per applicable Shaw E & I technical SOPs and/or the project work plans. Drilling should not be allowed to progress faster than the rig geologist can adequately observe conditions, compile logs, and supervise safety and sampling activities.
- 23. The rig geologist should also observe the make-up and tightening of connections as additional conductor casing joints are added to the drill string. Any observed drilling problems and causes, including significant down time, should be recorded on the appropriate forms.
- 24. Cuttings (i.e., left over soil samples) and fluid containment during drilling should be observed and supervised by the rig geologist as per the project work plans.



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- 25. Periodically measure the boring depth with a weighted tape to verify its depth. If it cannot be directly measured, then count rods or pipe lengths that have been inserted into the ground or take other action to verify depth (in a manner that is independent of asking the driller the boring depth).
- 26. If the borehole is to be abandoned once drilling and sampling is completed, follow procedures outlined in applicable Shaw E & I technical SOPs and the project work plans. The abandonment will be supervised by the rig geologist. If the borehole contains slough, the slough should be removed prior to abandonment.
- 27. If a monitoring well is to be installed in the borehole, follow appropriate Shaw E & I technical SOPs and project-specific requirements/procedures. The well installation will be supervised by the rig geologist.
- 28. After drilling, sampling, and well installation or borehole abandonment is completed, lay the conductor casing down and move the rig off of the location. The rig geologist or appropriate designee will supervise demobilization/site restoration. Additional demobilization requirements/procedures are as follows:
  - All debris generated by the drilling operation should be removed and appropriately disposed of.
  - The site should be cleaned, the ground washed as necessary, and the site conditions restored as per the project work plans.
  - All abandoned borings should be topped off and completed as per the project work plans. All
    wells should also have their surface completions finished as per the project work plans.
  - Any hazards remaining as a result of drilling activities should be identified and appropriate barriers and markers put in place, as per the project health and safety plan.
  - All soil cuttings and fluids should be properly contained, clearly labeled, and maintained in compliance with the project work plans and/or other applicable requirements.
- 29. Complete all appropriate forms and documentation as required in the project work plans.



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1 of 3

## STANDARD OPERATING PROCEDURE

Subject: Decontamination of Contact Sampling Equipment

#### 1. PURPOSE

This procedure defines the Shaw E & I standard that must be implemented for decontamination of contact sampling equipment. Contact sampling equipment is equipment that comes in direct contact with the sample or portion of sample that will undergo chemical analyses or physical testing. This SOP is intended to provide minimum guidelines and general procedures for decontaminating contact sampling equipment used during field sampling activities. The benefits of its use include the following:

- Minimizing the spread of contaminants within a study area and from site to site
- Reducing the potential for worker exposure by means of contact with contaminated sampling equipment
- Improved data quality and reliability

#### 2. SCOPE

This procedure applies to all instances where non-disposable direct contact sampling equipment is utilized for sample collection. This procedure is not intended to address decontamination of peristaltic or other sampling pumps and tubing. The steps outlined in this procedure must be executed between each distinct sample data point.

#### 3. REFERENCES

- U.S. Environmental Protection Agency, Region 4, 2001, Environmental Investigations Standard Operating Procedures and Quality Assurance Manual, 980 College Station Road, Athens, Georgia. November.
- US Army Corp of Engineers, Washington, D.C., 2001, Requirements for the Preparation of Sampling and Analysis Plans (EM-200-1-3), February.

#### 4. **DEFINITIONS**

- Soap—A standard brand of phosphate-free laboratory detergent, such as Liquinox®.
- Organic Desorbing Agent—A solvent used for removing organic compounds. The specific solvent would depend upon the type of organic compound to be removed. See Attachment 1 for recommendations.
- Inorganic Desorbing Agent—An acid solution for use in removing trace metal compounds. The specific acid solution would depend upon the type of inorganic compound to be removed. See Attachment 1 for recommendations.
- Tap water—Water obtained from any municipal water treatment system. An untreated potable water supply can be used as a substitute for tap water if the water does not contain the constituents of concern.



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2 of 3

• Analyte-free water (deionized water)—Water that has been treated by passing through a standard deionizing resin column, and for organics either distillation or activated carbon units. At a minimum, the finished water should contain no detectable heavy metals or other inorganic compounds, and/or no detectable organic compounds (i.e., at or above analytical detection limits). Analyte-free water obtained by other methods is acceptable, as long as it meets the above analytical criteria.

Other solvents may be substituted for a particular purpose if required. For example, removal of concentrated waste materials may require the use of either pesticide-grade hexane or petroleum ether. After the waste material is removed, the equipment must be subjected to the standard cleaning procedure. Because these solvents are not miscible with water, the equipment must be completely dry prior to use.

#### 5. RESPONSIBILITIES

#### 5.1 Procedure Responsibility

The Field Sampling Discipline Lead is responsible for maintenance, management, and revision of this procedure. Questions, comments, or suggestions regarding this technical SOP should be sent to the Field Sampling Discipline Lead.

#### 5.2 Project Responsibility

Shaw employees performing this task, or any portion thereof, are responsible for meeting the requirements of this procedure. Shaw employees conducting technical review of task performance are also responsible for following appropriate portions of this SOP.

For those projects where the activities of this SOP are conducted, the Project Manager, or designee, is responsible for ensuring that those activities are conducted in accordance with this and other appropriate procedures. Project participants are responsible for documenting information in sufficient detail to provide objective documentation (i.e. checkprints, calculations, reports, etc.) that the requirements of this SOP have been met. Such documentation shall be retained as project records.

#### 6. PROCEDURE

#### 6.1 Health and Safety

Minimum Health and Safety Procedures should be implemented based on the site-specific decontamination protocol that is designed. Health and Safety procedures should take into consideration the potential use of either dangerous solvents or corrosive liquids.

#### 6.2 Implementation

A decontamination area should be established. A separate tub needs to be available for each of the first four steps. Each type of water and soap solution can be placed in hand-held sprayers made of an inert material. The analyte-free water needs to be placed in a container that will be free of any compounds of concern. Special containers will be needed if solvents or acid solutions are used. For example, an acid solution cannot be placed in a sprayer that has any metal parts that will come in contact with the acid solution.

The minimum steps for decontamination are as follows:

1. Remove particulate matter and other surface debris using appropriate tools such as a brush or hand-held sprayer filled with tap water.



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Procedure No. Revision No. Date of Revision Last Review Date Page SOP T-FS-014 0 06/05/2003

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- 2. Scrub the surfaces of the contact sampling equipment using tap water and soap solution and a second brush made of inert material.
- 3. Rinse contact sampling equipment thoroughly with tap water.
- 4. Rinse contact sampling equipment thoroughly with analyte-free water (not necessary if sampling for disposal profiling purposes).
- 5. Place contact sampling equipment on a clean surface appropriate for the compounds of concern and allow to air dry.

It is Shaw E & I policy to containerize all decontamination fluids. This policy will be followed unless an the client specifically directs an alternate procedure in writing.

The use of solvents and/or acid solutions will be dependent on the site-specific conditions. A site with a high probability of high concentrations of compounds or with waste material present will require additional decontamination procedures. Attachment 1 provides some guidance for additional decontamination procedures.

#### 7. ATTACHMENTS

Attachment 1—Recommended Decontamination Procedures.

#### 8. FORMS

None.

#### **ATTACHMENT 1** RECOMMENDED DECONTAMINATION PROCEDURES

Compound	Detergent Wash	Tap Water	Inorganic Desorbing Agent	Tap Water	Organic Desorbing Agent <sup>1</sup>	Deionized Water	Air Dry
		Org	janics				
Volatile Organic Compounds	<b>*</b>	<b>✓</b>			Methanol Purge & Trap grade	✓	<b>✓</b>
Base Neutrals/Acid Extractables/PCBs/Pesticides	<b>✓</b>	✓			Hexane	✓	1
Organic Bases <sup>2</sup>	✓	✓	1% nitric acid	✓	Isopropyl Alcohol	✓	1
Organic Acids <sup>3</sup>	<b>✓</b>	✓	1% nitric acid		Isopropyl Alcohol	✓	✓
		Inor	ganics				
Trace Metals and Radio Isotopes	<b>✓</b>	✓	10% Nitric acid -Trace metals grade	✓		✓	✓
Cations/Anions	✓	✓				✓	1
Acidic Compounds	<b>✓</b>	✓				✓	1
Basic Compounds (caustic)	<b>✓</b>	✓	1% nitric acid	✓		✓	1

<sup>1 –</sup> All organic solvents must be Pesticide Grade or better. The selection of appropriate solvent rinses should first consider if a known or suspected contaminant requires removal from sampling equipment. Secondly, identify whether the subsequent analytical protocol would be impacted by the proposed solvent or an impurity thereof (e.g., residual acetone present in isopropyl alcohol would be measured with certain volatile organics analysis).

<sup>2 -</sup> Organic bases include amines, hydrazines.
3 - Organic acids include phenols, thiols, nitro and sulfonic compounds.

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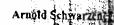
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Los Angeles Region

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320 W. 4th Street, Suite 200, Los Angeles, California 90013 Phone (213) 576-6600 FAX (213) 576-6640 - Internet Address: http://www.swrch.ca.gov/rwqcb4

August 27, 2004

Mr. Don Basinger

Wagner and Basinger Trusts

# FX-6 Personal Privacy

CONDITIONAL APPROVAL TECHNICAL INVESTIGATION REPORT PURSUANT TO CALIFORNIA WATER CODE SECTION 13267 – HAWKER PACIFIC AEROSPACE 11310 SHERMAN WAY, SUN VALLEY, CALIFORNIA (FILE NO. 111.0436)

Dear Mr. Basinger:

We have received the workplan dated June 14, 2004, which was prepared on your behalf by Shaw Environmental & Infrastructure, Inc. (Shaw) as directed in our letter dated March 15, 2004. Regional Board staff have reviewed the workplan and approve of the scope of work proposed with the following conditions and requirements:

- 1. Provide the Los Angeles County Assessors Parcel Number for this property;
- 2. Site plans showing soil boring location should be submitted in the final report in AutoCADD or GIS format.
- 3. All soil data points (soil borings) should be surveyed relative to longitude and latitude coordinates. Acceptable quality data may come from a commercially available, hand-held global positioning system (GPS) device.
- 4. Λ pre-workplan implementation site visit by Regional Board staff will be required to finalize the areas for assessment and logistics of the site investigation;
- 5. All soil samples collected at the 1, 5, 10, 15, 20, and 25-foot intervals must be analyzed for Title 22 heavy metals, including total chromium and hexavalent chromium, by the appropriate analytical methodologies that were indicated in the previously issued Regional Board guidance documents;
- 6. Provide a more detailed site plan/floor plan showing the location of all heavy metal plating tanks and hazardous chemicals storage area(s);
- 7. The following soil boring locations are to be added to the scope of work:

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Mr. Don Businger Wagner and Basinger Trusts 2

August 27, 2004

- (a) One vertical or angle boring (as is feasible) adjacent to each location of heavy metal plating tank;
- (b) One vertical boring adjacent to the north end of the NITAL tank, and one vertical boring on the south end of the NITAL tank (split difference with west end of the former clarifier).
- (c) One vertical boring adjacent to the chromium solution tank that is shown to be west of the NITAL tanks area.
- 8. Pursuant to the State Water Resources Control Board Resolution No. 92-49, under the California Water Code, Section 13304, all fieldwork related to well installation must be conducted by or under the direct responsible supervision of, a registered geologist or licensed civil engineer. All technical documents submitted to this Regional Board including Remedial Action Plans must be reviewed, signed and stamped by a California registered geologist, a California registered certified specialty geologist, or a California registered civil engineer with at least five years hydro-geologic experience.
- 9. Regional Board staff must receive a 48-hour notification of field activities, and site access in order to document the fieldwork.

The due date for submitting the final technical report is November 1, 2004. As provided in Section 13268 of the California Water Code, failure to submit the required technical report by the due date specified may result in administrative civil liability penaltics being assessed by the Regional Board, in an amount up to one thousand dollars (\$1,000) per day for each day the technical report is not received.

If you have any questions regarding this matter, please call Mr. Dixon Oriola at (213) 576-6803 or Mr. Alex Lapostol at (213) 576-6807.

Sincerely,

Dixon Oriola, Unit Chief

Well Investigation Program

- - ---

Mr. Thomas Erb, Department of Water & Power, City of Los Angeles

Mr. Leighton Fong, City of Glendale

Mr. Mark Mackowski, Upper Los Angeles River Area Watermaster

Mr. David Stensby, USEPA Superfund Division, Region IX, San Francisco

Mr. Fred Lantz, Water Supply Department, City of Burbank

Ms. Patricia O' Toole, Legal Counsel

Mr. Norman Berger, Legal Counsel

#### California Environmental Protection Agency

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#### THE O'TOOLE LAW FIRM

ATTORNEYS AT LAW

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42MP FLOOR

LOS ANGELES, CALIFORNIA 90071

September 15, 2004

Mr. Alex Lapostol Regional Water Quality Control Board Los Angeles Region 320 W. Fourth Street, Suite 200 Los Angeles, CA 90013

Re: Hawker Pacific Aerospace Site Technical Investigation, File No. 111.0436

Dear Mr. Lapostol:

This firm represents the owners of the real property located at 11310 Sherman Way in Sun Valley, California, which are various family trusts to which I will refer collectively as the "Basinger and Wagner Trusts." Hawker Pacific Aerospace is the current tenant on the 11310 Sherman Way parcel owned by the Basinger and Wagner Trusts (the "Basinger-Wagner Parcel"). Hawker Pacific Aerospace operates three buildings on the Basinger-Wagner Parcel (Buildings 1, 2 and 3).

Hawker Pacific Aerospace also operates on an adjacent parcel, 11240 Sherman Way, which is not owned by the Basinger and Wagner Trusts or any party related to them (the "11240 Sherman Way Parcel"). Hawker Pacific Aerospace operates five buildings on the 11240 Sherman Way Parcel (Buildings 4, 5, 6, 7 and 8).

On June 14, 2004, Shaw Environmental & Infrastructure, Inc. submitted to the RWQCB a Workplan for a Hexavalent Chromium Investigation in Shallow Soil (hereafter the "Workplan") on behalf of both the Basinger and Wagner Trusts and Hawker Pacific Aerospace. The Workplan proposed 11 soil borings, six of which are located on the Basinger-Wagner Parcel and five of which are located on the 11240 Sherman Way Parcel.

On August 27, 2004, the RWQCB issued a conditional approval of the Workplan, with a November 1, 2004 deadline for the implementation of the workplan and submittal of a final report. As we discussed on the telephone yesterday, the parties will need additional time to reach an agreement on the implementation of the Workplan, and to complete the work and prepare the final report for submittal to the RWQCB. Therefore, on behalf of the Basinger and Wagner Trusts, I am requesting an extension of the deadline until December 1, 2004.

Mr. Alex Lapostol RWQCB September 15, 2004 Page 2

I would appreciate it if you would confirm the deadline extension in writing to both the Basinger and Wagner Trusts and to Hawker Pacific Aerospace. As indicated in the Workplan, Hawker Pacific Aerospace's administrative offices are located on the 11240 Sherman Way Parcel. Mr. Norman Berger, who is already on your contact list for this matter, is Hawker Pacific Aerospace's legal counsel. The proper contact information for the Basinger and Wagner Trusts is the following:

The Basinger Trusts



and

The Wagner Trusts c/o Mrs. Peggy Wagner

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with a copy to me at:

The O'Toole Law Firm P. O. Box 352348 Los Angeles, CA 90035-0260.

Thank you for your consideration in this matter. Please feel free to call me at (213) 630-4220 if you have any questions or would like to discuss this further.

Very truly yours,

Patricia M. O'Toole

Norman Berger, Esq.

cc:

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# Los Angeles Region

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Terry Tamminen Secretary for Environmental Protection

320 W. 4th Street, Suite 200, Los Angeles, California 90013 Phone (213) 576-6600 FAN (213) 576-6640 - Internet Address: http://www.swrcb-ea.gov/rwqcb4

September 30, 2004

Hawker Pacific Aerospace c/o Mr. Brian Carr 11240 Sherman Way Sun Valley, California 91352

The Basinger Trusts o Mr. Don Basinger

X-6 Personal Privacy

The Wagner Trusts c/o Mrs. Peggy Wagner

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DEADLINE EXTENSION FOR TECHNICAL INVESTIGATION REPORT PURSUANT TO CALIFORNIA WATER CODE SECTION 13267 – HAWKER PACIFIC AEROSPACE 11240 SHERMAN WAY, SUN VALLEY, CALIFORNIA (FILE NO. 111,0436)

Dear Mr. Carr, Mr. Basinger and Mrs. Wagner,

We have received a deadline extension request from Ms. Patricia O'Toole, legal counsel for the Basinger, and Wagner Trusts dated September 15, 2004. The letter requests an extension of the November 1, 2004 deadline to submit the final technical report for the scope of work outlined in the technical workplan submitted on your behalf by Shaw Environmental & Infrastructure, Inc. (Shaw) as directed in our letter dated March 15, 2004. Regional Board staff hereby grants your request for deadline extension.

Consequential to the Regional Board's consideration for a deadline extension, we have reexamined the file, and reviewed Shaw's Technical Investigation Report for this project and we find that current and former chemical storage areas are located on the 11240 Sherman Way parcel, along with the properties owned by the Basinger and Wagner Trust. We also conclude that Hawker Pacific Aerospace (Hawker) is henceforth a responsible party. Hawker will now be required, in addition to the Basinger and Wagner Trust, to fulfill Regional Board assessment requirements as stipulated in our March 15, 2004 letter.

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Mr. Brian Carr & the Basinger and Wagner Trust Hawker Pacific Aerospace Site September 30, 2004

Regional Board staff must receive a 48-hour notification of field activities, and site access in order to document the fieldwork.

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The due date for submitting the final technical report is December 15, 2004. As provided in Section 13268 of the California Water Code, failure to submit the required technical report by the due date specified may result in administrative civil liability penalties being assessed by the Regional Board, in an amount up to one thousand dollars (\$1,000) per day for each day the technical report is not received.

If you have any questions regarding this matter, please call Mr. Alex Lapostol at (213) 576-6807 or the undersigned at (213) 576-6803.

Sincerely,

Dixon Oriola, Unit Chief

Well Investigation Program

cc: Mr. Thomas Erb, Department of Water & Power, City of Los Angeles

Mr. Leighton Fong, City of Glendale

Mr. Mark Mackowski, Upper Los Angeles River Area Watermaster

Mr. David Stensby, USEPA Superfund Division, Region IX, San Francisco

Mr. Fred Lantz, Water Supply Department, City of Burbank

Ms. Patricia O' Toole, Legal Counsel

Mr. Norman Berger, Legal Counsel

California Environmental Protection Agency

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# HEXAVALENT CHROMIUM INVESTIGATION IN SHALLOW SOIL

Hawker Pacific Aerospace Facility Sun Valley, California

January 28, 2005

Prepared for: Hawker Pacific Aerospace

and

The Wagner and Basinger Trusts

Prepared by:



3700 State Street, Suite 350 Santa Barbara, California 93105

#### Certification

This document was prepared by Shaw Environmental & Infrastructure, Inc., under the professional direction and review of the registered professional listed below. The work described herein was prepared in accordance with generally accepted professional engineering and geologic practice at this time and place. No other warranty exists, either expressed or implied.

James T. Wells, Ph.D., KOCALEON

California Registered Geologist #7212

January 28, 2005

Date

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Shaw Shaw Environmental & Infrastructure, Inc.	

## Section 1. Introduction

#### A. Objectives of the Investigation

The purpose of this document is to present results from Hawker Pacific Aerospace and the Wagner and Basinger Trusts' subsurface environmental investigation at the Hawker Pacific Aerospace facility in Sun Valley, California. The investigation was designed to evaluate whether or not elevated concentrations of hexavalent chromium are present in shallow soil underlying portions of the site where hexavalent chromium is (or was in the past) used or stored. The investigation was conducted in accordance with the June 14, 2004 work plan (Shaw Environmental, 2004) which was approved by the California Regional Water Quality Control Board, Los Angeles Region (RWQCB) on August 27, 2004. The work was initiated in response to a request from the RWQCB to the Wagner and Basinger Trusts in a letter dated March 15, 2004 and a subsequent request to both Hawker Pacific Aerospace and the Wagner and Basinger Trusts in a letter dated September 30, 2004.

#### **B.** Site Description

The Hawker Pacific Aerospace site is located on Sherman Way, near the Burbank Airport (Figure 1). Administrative offices and Buildings 4, 5,6, 7 and 8 are located at 11240 Sherman Way. Buildings 1, 2 and 3 are located on an adjacent parcel at 11310 Sherman Way. The Wagner and Basinger Trusts own the real property at 11310 Sherman Way. Hawker Pacific Aerospace repairs and overhauls aircraft landing gears and hydraulic components.

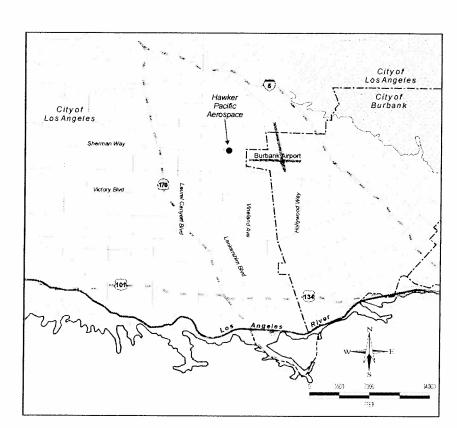


Figure 1
Site Location Map
Hawker Pacific Aerospace
Sun Valley, California

The repair and overhaul of landing gears has been the principal operation at the site since October 1966; although different business entities have operated at the site since that time. The Wagners and Basingers purchased the real property parcel located at 11310 Sherman Way in May 1966, and Stellar Hydraulics commenced operations on that portion of the current site in October 1966. Stellar Hydraulics was purchased by Canoga Industries in August 1968, and Canoga Industries operated on the site until 1977. In 1977, Canoga Industries merged with Zero Corporation and the landing gear overhaul business continued under the Zero Corporation name. In 1979, Zero Corporation sold the Sherman Way operation to Bertea Corporation which—in turn—merged with Parker-Hannifin in 1980. Parker-Hannifin operated at the site until 1982 when Flight Accessory Services purchased the operation. In 1987, Hawker Pacific Aerospace purchased substantially all of the assets of the landing gear overhaul operation at the site and Hawker Pacific Aerospace operates at the site to this day. The current operation occupies eight buildings as shown on Figure 2.

#### C. Use of Heavy Metals at Hawker Pacific Aerospace

As part of the process of overhauling aircraft landing gears, Hawker Pacific Aerospace conducts plating operations involving chromium as well as other metals such as nickel and cadmium. No chromium spills or leaks have been reported at this site and no chromium subsurface investigations have been conducted in the past. Chromium for the plating operation is purchased and stored as solid chips. According to purchasing records, Hawker Pacific Aerospace's chromium usage in recent years has been as follows:

2003	10,400 pounds chromium trioxide chips
2002	9,400 pounds chromium trioxide chips
2001	4,600 pounds chromium trioxide chips

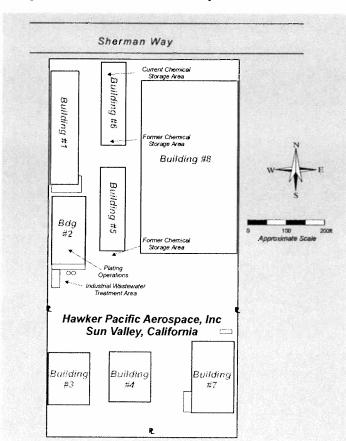


Figure 2
Facility Map
Hawker Pacific Aerospace
Sun Valley, California

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Because no spills or leaks have been reported at this site, sampling locations for this investigation consisted of process areas (in particular, Building 2 where chromium plating operations are conducted) and all known current or past chemical and waste storage locations.

Plating operations were first conducted at the site by Canoga Industries, starting in late 1968, and have always been located in Building 2. The plating tanks currently consist of (from south to north) a rinse water tank (previously used as an iridite tank), a caustic solution tank, a nickel plating tank, a cadmium plating tank and four chromium plating tanks (Figure 3). These tanks are mounted in a 6-foot deep concrete pit which contains a small sump at its northwestern corner. Directly north of the plating tanks is a 5-stage clarifier which is no longer in use. The clarifier was connected to the City sewer line until 1994 when the connection was capped and cemented. Process wastewater is now piped to a closed-loop vacuum distillation unit located immediately south of Building 2 for treatment and recycling. Building 2 also contains the NITAL area which consists of seven tanks containing: iridite, nitric acid, hydrochloric acid, caustic solution and rinse water tanks.

Raw materials (including chromium trioxide chips in 100 lb. containers) are currently stored in the north end of Building 6. Over the years, raw materials have been stored in two other areas at the site: the southern portion of Building 6 and outside the southern end of Building 5.

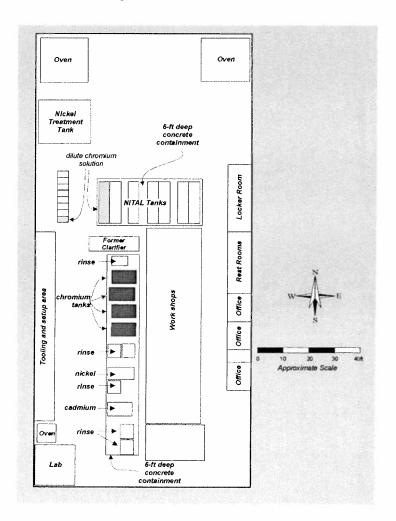


Figure 3
Building 2 Plating Operations
Hawker Pacific Aerospace
Sun Valley, California

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All liquid waste streams from the plating operation are treated in Hawker Pacific Aerospace's vacuum distillation unit. The only waste from this operation is a liquid concentrate which accumulates in a small tank in the treatment compound. The liquid concentrate is periodically emptied from the accumulation tank and transported under manifest to an offsite treatment and recycling facility.

#### Section 2. Previous Environmental Work

Hawker Pacific Aerospace and the Wagner and Basinger Trusts have conducted a number of environmental investigations at the Sherman Way site. In response to a regulatory request (RWQCB, 1988) Hawker Pacific Aerospace conducted a series of investigations in 1988 and 1989 (Law Environmental, 1989a; 1989b, 1990a). These investigations focused on assessing the presence or absence of volatile organic compounds (VOCs) in soil underlying the site. Soil borings were advanced and soil samples were analyzed for VOCs at or near the chemical storage sheds, an above-ground trichloroethene (TCE) tank, an above-ground waste oil tank, a flammable liquid shed, two private septic systems, and the industrial waste clarifier. Upon review of data from these investigations, the RWQCB concluded that no further action was necessary at the site with respect to the Well Investigation Program (RWQCB, 1990).

In 1989, Hawker Pacific Aerospace personnel discovered a previously unknown 280-gallon underground storage tank (UST) and sump on the western edge of the property between Buildings 1 and 2. Hawker Pacific Aerospace notified RWQCB of this discovery by letter (Hawker Pacific Aerospace, 1989). In August 1990, Law Environmental conducted a soil investigation in the UST and sump area. Petroleum hydrocarbons and chlorinated compounds—principally tetrachloroethene (PCE)—were detected in a very limited zone of shallow soil and no PCE was detected deeper than 30 feet below ground surface (bgs). With representatives of the RWQCB and Los Angeles County Fire Department in attendance, the tank and sump were removed in August 1991 (Law Environmental, 1991).

In 1993 the US Environmental Protection Agency (USEPA) notified Hawker Pacific Aerospace that the agency considered it to be a potentially responsible party (PRP) for regional groundwater contamination in the San Fernando Valley (USEPA, 1993). USEPA demanded a large financial payment from Hawker Pacific Aerospace as its share of cleanup costs. While Hawker Pacific Aerospace negotiated this claim with the federal government, the RWQCB notified Hawker Pacific Aerospace that it was necessary to implement a soil vapor extraction program to mitigate VOC impacts to soil. Hawker Pacific Aerospace believed the soil vapor extraction program was unnecessary. In particular, data collected in the early 1990s showed that remaining impacts to shallow soil were small to nonexistent. For example, in June 1992, Law/Crandall, Inc. had collected soil samples while installing four vapor extraction wells (Law/Crandall, 1993). Similarly Geraghty & Miller collected soil samples in January 1994 in the vicinity of the former UST and sump. The results of both sampling efforts showed only scattered and low concentrations of VOCs (of the samples collected by Law, only one of eight contained PCE, at a concentration of 31 µg/kg; of the samples collected by Geraghty & Miller, none of 17 samples contained PCE).

Geraghty & Miller also conducted neutron logging at the site to a depth of approximately 84 feet bgs and analyzed soil samples for a suite of physical soil tests that showed—among other things—that the vadose zone is heterogeneous with continuous perched (saturated) zones in the vadose zone. This was a fundamental finding because it showed that barriers to vertical flow of both soil moisture and soil vapor exist in the subsurface that serve to minimize the risk of shallow soil impacts to the underlying groundwater.

In its March 1996 report to the RWQCB, Geraghty & Miller (1996a) summarized and interpreted the available subsurface data and concluded that PCE impacts to the soil consisted of a localized zone with low concentrations. Geraghty & Miller found that PCE concentrations in soil fell below cleanup thresholds for protection of groundwater quality (using the methodology promulgated in the RWQCB's 1995 Interim Guidance Document). Geraghty & Miller concluded that the vapor extraction program was not necessary and recommended that it not be implemented



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The RWQCB responded (RWQCB, 1996a) with a request for additional investigative work in the vicinity of the former UST and sump in order to confirm the limited extent of PCE in shallow soil. Geraghty & Miller submitted a work plan (Geraghty & Miller, 1996b) and conducted additional work in June 1996, consisting of soil sampling, soil vapor sampling and analysis of the organic carbon content in soil samples. Integrating this new data with existing information, Geraghty & Miller used RWQCB methodology (RWQCB, 1995) to recalculate the potential for groundwater impact from the minor occurrence of shallow soil contamination. The combination of low VOC concentrations, heterogeneous vadose zone lithology, and the great depth to groundwater (237.5 feet bgs in 1996 and nearly 300 feet bgs today) demonstrated the validity of Geraghty & Miller's earlier conclusion that the known soil impact at the Hawker Pacific Aerospace site did not constitute an unacceptable threat to groundwater quality. The RWQCB (1996b) concurred with this interpretation (essentially reaffirming its 1990 opinion) in a November 1996 letter: "we have no further requirements with respect to the Well Investigation Program for the subject site."

# Section 3. Field Activities

#### A. Soil Sampling

This investigation consisted of collection of 81 soil samples at depths ranging from 1 to 25 feet below ground surface at the Hawker Pacific Aerospace site in Sun Valley, California. As discussed in Section 1, sampling locations were chosen based on the current or former existence of chrome plating operations and material or waste storage areas and were approved by a RWQCB representative during a pre-drilling site walk on December 1, 2004. During the site visit, 15 soil boring locations were agreed upon (13 targeted locations and 2 background locations) from which soil samples were subsequently collected at 5-foot intervals. In some cases, the locations differed somewhat from those proposed in the June 14, 2004 work plan thus, the locations marked during the site walk superseded the locations proposed in the work plan.

#### Health and Safety Considerations

The investigation was conducted in adherence with the Health and Safety Plan which can be found in Appendix A of the Work Plan. The Health and Safety Plan describes in detail the procedures for maintaining a safe workplace and precautions that were employed by Shaw personnel to protect against potential exposure to chemical and physical hazards.

#### Soil Sampling

Soil sampling was accomplished by advancing 15 soil borings: 13 in areas related to chromium use or storage at the site and two at background locations as shown on Figure 4. The location of each soil boring was measured with a hand-held GPS unit, as required in the RWQCB's General Workplan Requirements for a Heavy Metal Soil Investigation, and the coordinates of each boring are provided in Table 1. Nine soil borings were located adjacent to plating operations in Building 2. Three borings were located in the chemical storage areas (one current storage area and two former areas: see Figure 4). One boring was located directly adjacent to the industrial wastewater treatment system south of Building #2. Finally, the two background borings were located near the eastern boundary of the Hawker Pacific Aerospace site, in locations remote from any known current or former chemical storage or handling areas.

Prior to beginning field activities, Shaw marked all boring locations with spray paint and notified Underground Services Alert of the intent to conduct a subsurface investigation at the site.

Sample locations within buildings required concrete coring to access the underlying soil. A concrete coring subcontractor cut a 6-inch diameter core at each location. Soil borings were then advanced using a direct-push drilling system. Drilling and soil sampling were conducted in accordance with Shaw's standard operating procedure for direct push drilling (see Appendix B of the Work Plan)

In accordance with the RWQCB's General Workplan Requirements for a Heavy Metal Soil Investigation soil samples from plating and material and waste storage areas were collected at depths of approximately 1, 5, 10, 15, 20 and 25-feet bgs. Soil samples from background locations were collected at depths of 1 and/or 10-feet bgs. No significant lithologic heterogeneity was encountered so it was concluded that additional background samples were not needed to capture any natural compositional variability of metal concentrations in soils at this site.

Soil samples were collected at the desired intervals using a direct-push sampling device fitted with acetate or brass sample sleeves. Once the sleeve was extracted from the sampling device, it was immediately capped with Teflon and a plastic cap, labeled and stored on ice in a cooler. The samples were delivered each day to



Severn Trent Laboratory, a State of California-certified laboratory for chemical analysis. Chain of custody records were maintained from the time of collection through receipt of the samples by the laboratory. During sampling, a California-registered Shaw geologist logged soil profiles using the Unified Soil Classification System (see Appendix A for the soil boring logs) and samples were also screened using a photoionization detector.

Once again, following standard operating procedures, the soil borings were backfilled with Portland cement. Finally, the surface was patched with concrete or asphalt to match surrounding grade.

#### Quality Assurance/Quality Control

Internal quality control checks were performed for the soil sampling and analytical procedures by collecting, analyzing, and evaluating field quality control samples. The laboratory followed its own QA/QC program in compliance with its state-approved Quality Assurance Plan. Field-based quality control procedures included collection of the following data:

- Field rinsate blanks field equipment blanks were collected using laboratory-provided water to assess the effectiveness of decontamination procedures (see below) for soil sampling equipment and to evaluate any potential cross contamination between soil samples. One field equipment blank was collected for each of the two days of soil sampling and was be tested for the same analyses as soil samples.
- Trip blanks trip blanks are used to identify any potential sample contamination during handling and transport to the analytical laboratory. The trip blanks were provided by the laboratory and each day, one trip blank accompanied the cooler containing soil samples to be analyzed for metals.
- Temperature blanks temperature blanks are used to assess soil sample storage procedures and accompanied each soil sample cooler.

#### Decontamination of Field Equipment

Field equipment that comes into contact with soil was decontaminated in accordance with Shaw's standard operating procedure for decontamination (Appendix B of the Work Plan). For metals, an important component of the decontamination procedure is to rinse equipment with an acid desorbing wash. Wastewater from the decontamination process was directed to the industrial wastewater treatment system operating at the site.

#### **B.** Laboratory Analysis of Samples

All soil samples were initially tested for Title 22 metals using EPA Method 6020. If the concentration of total chromium from a specific sample exceeded EPA Region IX's SSL (soil screening level) of 38 mg/kg or otherwise appeared to be elevated, then a split of that sample was further analyzed for hexavalent chromium using EPA Method 7199. Samples from background borings and other selected locations were also analyzed for hexavalent chromium in spite of the fact that total chromium levels were low (less than 10 mg/kg) in these samples. This sampling protocol is reasonable because the SSL is EPA's estimate for threshold concentrations that constitute a potential threat to underlying groundwater. It follows that if total chromium is less than 38 mg/kg, hexavalent chromium must also be less than 38 mg/kg and that particular sample would not represent a likely threat to groundwater quality (thus negating the usefulness of running the costly hexavalent chromium test). All tests were conducted within the appropriate EPA-specified holding times.



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# Section 4. Results and Conclusions

The upper 25 feet of the soil column underlying Hawker Pacific is quite homogeneous, consisting of coarse sand and sandy gravel (see boring logs in Appendix A). The finer-grained units noted in Section 2 are encountered at a greater depth.

We observed no evidence of staining or unusual occurrences of soil moisture that might have signified a release. Laboratory results are tabulated in Table 2 and displayed on Figure 4. Full laboratory reports are included in Appendix B. At the background sampling locations, hexavalent chromium was not detected (the laboratory detection limit was 0.4 mg/kg) and total chromium concentrations varied between 1.9 to 3.9 mg/kg. In the targeted sampling locations, no samples were found to contain hexavalent chromium in excess of EPA Region IX's soil screening level of 38 mg/kg. However, there are occurrences of total and hexavalent chromium near the plating tanks in Building 2 at levels above natural background concentrations. These occurrences are limited to shallow soil horizons. For example, the highest chromium detection was in the 1-foot sample at soil boring DP-4 (total chromium = 180 mg/kg; hexavalent chromium = 34 mg/kg) but the next deeper sample at 5-feet has no indication of elevated chromium (total chromium = 3.0 mg/kg; hexavalent chromium = nondetect). The deeper samples from this boring exhibit similarly low chromium levels indicative of natural background concentrations. A similar pattern prevails at DP-2 where the 1-foot sample contained 48 mg/kg total chromium but all the deeper samples (5-25 feet) contained less than 10 mg/kg.

A reasonable interpretation of this finding is that over the years, small drips and spills from the plating operation have diffused through the concrete floor and impacted the soil directly underlying the floor. The low volume of such drips and spills and the lack of infiltration due to the presence of the concrete slab have combined to limit the vertical extent of total and hexavalent chromium occurrences in the soil. Groundwater is nearly 300 feet deep in this area, thus, we believe limited infiltration and the extensive depth of the vadose zone provide sufficient protection against groundwater impact from this surficial occurrence. This conclusion is reinforced by Geraghty & Miller's work between 1994 and 1996 (see Section 2) in which the vadose zone was carefully mapped and found to contain occasional, continuous fine-grained layers. Just as these barriers to vertical soil moisture flow served to minimize the risk of shallow VOC impacts to the underlying groundwater in the past, they provide the same protective function for chromium in shallow soil today.

In recent years, Hawker Pacific Aerospace has implemented physical improvements to the plating process that are likely to mitigate the potential for any ongoing release. In 2000 Hawker Pacific applied a rolled epoxy to the walls and floor of the plating containment pit as well as along the floor surrounding the pit where there is a seam between the sidewalls and the floor of the building. In 2004, Hawker Pacific fabricated drip pans for the building floor for the front of the tanks as well as between the tanks to catch drips from treated parts as they are moved in and out of the tanks. The drip pans are periodically vacuumed and cleaned in the rinse tanks. Finally, the entire floor in the plating area was painted in 2004 with a water-based epoxy paint to minimize infiltration of liquids into the concrete.

Considering a) the limited extent of this occurrence of elevated chromium; b) the fact that the affected soil is confined to an area under a concrete slab (i.e. there is no human exposure pathway); and c) the physical improvements recently implemented by Hawker Pacific, we recommend no action at this time.



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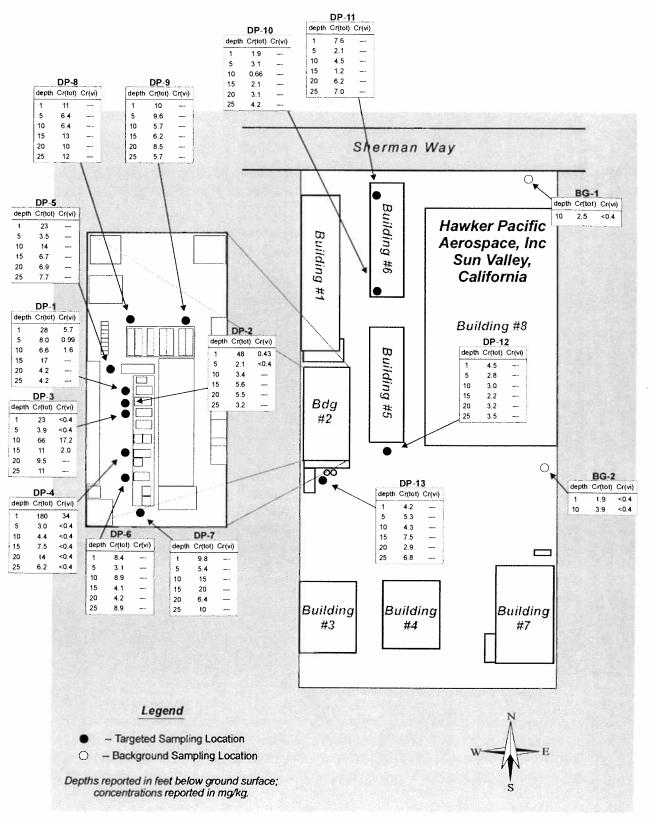


Figure 4
Chromium in Soil
Hawker Pacific Aerospace
Sun Valley, California

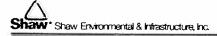
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TABLE 1
DECEMBER 2004 SOIL BORING LOCATIONS
HAWKER PACIFIC AEROSPACE, SUN VALLEY, CA

	1	
SOIL BORING	Northing	Easting
DP-1	1895338.451	6447651.531
DP-2	1895325.951	6447652.364
DP-3	1895312.618	6447652.364
DP-4	1895294.285	6447652.364
DP-5	1895346.785	6447633.198
DP-6	1895279.285	6447651.531
DP-7	1895274.285	6447663.198
DP-8	1895368.451	6447656.531
DP-9	1895369.285	6447684.864
DP-10	1895542.618	6447744.031
DP-11	1895708.451	6447752.364
DP-12	1895259.890	6447746.919
DP-13	1895240.951	6447642.364
BG-1	1895734.041	6448000.679
BG-2	1895279.070	6448024.183

TABLE 2
DECEMBER 2004 SOIL ANALYTICAL RESULTS
HAWKER PACIFIC AEROSPACE, SUN VALLEY, CA

TO CONCERCT / CO	CONCENTRATION (mg/kg)								
SAMPLE	Chromium	Chromium			11				
NAME <sup>1</sup>	(Total)	(Hexavalent)	Cadmium	Nickel	Lead				
DP-1-1	28	5.7	0.25	14	12				
DP-1-5	8.0	0.99	<0.12	6.7	0.74				
DP-1-10	6.6	1.6	0.54	4.5	1.1				
DP-1-15	17		0.93	17	2.6				
DP-1-20	4.2		0.47	12	1.3				
DP-1-25	4.2		0.12	4.2	1.5				
DP-2-1	48	0.43	0.38	35	12				
DP-2-5	2.1	<0.4	<0.12	2.1	1.0				
DP-2-10	3.4	· · · · ·	<0.12	2.6	0.98				
DP-2-15	5.6		<0.12	5.2					
DP-2-19	5.5				1.2				
DP-2-25			0.22	6.0	1.2				
	3.2		<0.12	2.8	0.91				
DP-3-1	23	<0.4	1.8	17	7.2				
DP-3-5	3.9	<0.4	<0.12	4.1	1.2				
DP-3-10	66	17.2	<0.12	61	2.1				
DP-3-15	11	2.0	<0.12	5.6	1.4				
DP-3-20	9.5		<0.12	6.5	1.3				
DP-3-25	11		<0.12	5.6	0.95				
DP-4-1	180	34	0.71	15	21				
DP-4-5 DP-4-10	3.0	<0.4	<0.12	2.6	0.88				
DP-4-10 DP-4-15	4.4 7.5	<0.4	0.63	4.3	2.6				
DP-4-10 DP-4-20	14	<0.4 <0.4	<0.12	5.8	1.4				
DP-4-25	6.2	<0.4	0.16 <0.12	8.8 <b>4</b> .7	1.0				
DP-5-1	23	<b>~</b> 0.4	0.48	4.7 17	1.1				
DP-5-5	3.5		<0.48	3.7	13 1.2				
DP-5-10	14		<0.12	7.8	2.9				
DP-5-15	6.7		<0.12	7.0 5.4	1.2				
DP-5-20	6.9		<0.12	4.6	1.1				
DP-5-25	7.7		0.11	5.2	4.4				
DP-6-1	8.4		<0.12	150	6.3				
DP-6-5	3.1		<0.12	2.7	1.1				
DP-6-10	8.9	***	<0.12	11	2.2				
DP-6-15	4.1		<0.12	3.3	1.3				
DP-6-20	4.2		<0.12	3.7	1.2				
DP-6-25	8.9		<0.12	5.4	1.8				
DP-7-1	9.8		<0.12	7.4	9.0				
DP-7-5	5.4		<0.12	160	1.3				
DP-7-10	15		<0.12	8.3	1.0				
DP-7-15	20	***	<0.12	10	1.2				
DP-7-20	6.4		<0.12	4.0	1.2				
DP-7-25	10		<0.12	6.4	1.1				
DP-8-1	11		0.64	12	37				
DP-8-5	6.4		<0.12	4.6	0.98				
DP-8-10	6.4	***	<0.12	4.2	1.4				



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TABLE 2, continued

DECEMBER 2004 SOIL ANALYTICAL RESULTS

HAWKER PACIFIC AEROSPACE, SUN VALLEY, CA

	CONCENTRATION (mg/kg)										
SAMPLE	Chromium	Chromium									
NAME <sup>1</sup>	(Total)	(Hexavalent)	Cadmium	Nickel	Lead						
DP-8-15	13	***	0.12	10	3.1						
DP-8-20	10		<0.12	6.1	1.4						
DP-8-25	12		<0.12	6.9	1.1						
DP-9-1	10		0.65	8.7	34						
DP-9-5	9.6		3.4	6.3	1.0						
DP-9-10	5.7	NAME AND ADDRESS OF THE PARTY O	0.13	3.8	0.98						
DP-9-15	6.2		1.0	5.1	1.7						
DP-9-20	8.5		<0.12	5.2	1.0						
DP-9-25	5.7		<0.12	4.0	1.0						
DP-10-1	1.9		<0.12	2.4	0.81						
DP-10-5	3.1		<0.12	2.7	1.1						
DP-10-10	0.66		<0.12	1.1	0.44						
DP-10-15	2.1		<0.12	1.8	0.84						
DP-10-20	3.1		<0.12	3.3	1.2						
DP-10-25	4.2		<0.12	3.6	1.3						
DP-11-1	7.6		0.11	6.1	7.6						
DP-11-5	2.1		<0.12	2.0	1.0						
DP-11-10	4.5		<0.12	4.6	1.4						
DP-11-15	1.2		<0.12	1.5	0.76						
DP-11-20	6.2		<0.12	11	0.94						
DP-11-25	7.0		<0.12	5.0	0.83						
DP-12-1	4.5		<0.12	3.7	8.2						
DP-12-5	2.8		<0.12	2.3	1.0						
DP-12-10	3.0		<0.12	2.1	1.1						
DP-12-15	2.2		<0.12	3.2	1.1						
DP-12-20	3.2	*****	<0.12	3.9	0.98						
DP-12-25	3.5		<0.12	2.4	1.4						
DP-13-1	4.2		<0.12	5.8	1.0						
DP-13-5	5.3		<0.12	3.1	1.2						
DP-13-10	4.3		<0.12	2.9	1.4						
DP-13-15	7.5		<0.12	5.5	2.2						
DP-13-20	2.9		<0.12	1.8	1.0						
DP-13-25	6.8		<0.12	3.2	1.3						
BG <sup>2</sup> -1-10	2.5	<0.4	<0.12	2.8	1.1						
BG <sup>2</sup> -2-1	1.9	<0.4	<0.12	2.0	1.1						
BG <sup>2</sup> -2-10	3.9	<0.4	<0.12	3.4	1.3						

<sup>&</sup>lt;sup>1</sup>Second number on sample name corresponds to depth in feet.

<sup>&</sup>lt;sup>2</sup>The "BG" designation refers to background samples.

# APPENDIX A SOIL BORING LOGS



Boring Num	ber.					<u> </u>			Page _	1	of	1
Project			Hawker	Pac	ific			Client		Hawker	Pacific	
Location			**************************************		Sur	ı Valle	ey, CA			Project No	10939	8
Surface Elev.	NA									East_		
Top of Casing		IA							NA		Boring Dia.	3"
Screen: Dia.		IA	_ Screen In	terva	al			NA		Type/Size_	NA	
Casing: Dia.		IA	_ Casing Int	terva	ıl			NA		Type_	NA	
Fill Material			Ве	ento	nite	Chips	3		Rig/Core_	Geopro	be / Direct P	ush
Drill Co.		Interphase							Direct I	Push		
Driller			Eric	3				Logged By_	Chr	is Rohlfing	ı, RG #7229	
Start Time/Date			12-17-04	0	720			End Time/Date		12-17-04	0740	
Sample ID	PID	Lithology	Weil Const.	Driven	Recovery	Depth	USCS Class.		De	scription		
				L				4" asphalt, 6" base				
BG-1-1	_			┡		1	SM	SILTY SAND WITH	10	10 -5743704-5-		
				Ͱ	H	-		medium sand, suba				
				┢		2		subround; 15% silt;	; yellow brown,	moist, no odd	or.	
				r		3						-
											1,100	
						4						
					Ц						-	
				-	Н	5	SP	POORLY GRADED				nd
					$\vdash$			and 40% medium s			d; 10% gravel,	
					$\vdash$	6		angular to subround	d; pale brown,	dry, no odor.		
						7						
						8						
						9		as above, dry, no o	dor.			
20.4.45								- II				
BG-1-10				$\bowtie$	***	10		Total Depth = 10 fee	et, backfilled w	ith bentonite	chips	



Boring Num	ber:	ber: BG-2							Page_	1	of	1
Project			Hawker	Pac	ific			Client_		Hawker	Pacific	
Location					Sun	Valle	ey, CA	\		Project No	10939	98
Surface Elev.	NA		Total Depth 10' North			٦		East_				
Top of Casing	1	۱A	_Water Level								Boring Dia.	3"
Screen: Dia.		<b>I</b> A	Screen Inf	terva	al			NA		Type/Size_	NA	
Casing: Dia.		۱A	_ Casing Inf	terva	il			NA		Type_	NA	
Fill Material			Ве	nto	nite	Chips	S		Rig/Core_	Geopro	obe / Direct F	'ush
Drill Co.			Interph	nase	e			Method		Direct	Push	
Driller											g, RG #7229	
Start Time/Date	· · · · · · · · · · · · · · · · · · ·		12/17/2	200	4			End Time/Date		12/17/	2004	
Sample ID	PID	Lithology	Well Const.	Driven	Recovery	Depth	USCS Class.		De	escription		
				L	Ш			4" asphalt, 6" base				
BG-2-1		1		L	Н	1 SM SILTY SAND WITH GRAVEL: About 40% fine sand an						
				┡	Н	-		medium sand, suba				)
-	-			┢	Н	2		subround; 15% silt;	yellow brown	, moist, no od	or.	
				┢	Н	3						
					П	Ť						
						4						
				L		5	SW	WELL GRADED SA	AND WITH GR	RAVEL: Abou	t 30% fine sand,	, 30%
				$\vdash$	$\vdash$			medium sand, and				-
					Н	6	-	fine gravel, angular	to round; light	yellowish bro	own, dry, no odo	r.
					П	7						
									42700000			
						8				2		
										111210		
					***	9						
00 2 40								as above, dry, no oc				
BG-2-10	I II			888	888	10		Total Depth = 25.5 f	feet, backfilled	with bentonit	e chips	



Boring Numb	per:	er: DP-1							Page_	1	of	2
Project			Hawker F	<sup>o</sup> ac	ific			Client		Hawker	Pacific	
Location					Sur	valle	y, CA	\		Project No	10939	8
Surface Elev.	NA		_ Total Depth	1	2	5'	_ North	1		East_		
Top of Casing		NA	_Water Level								Boring Dia.	3"
Screen: Dia.		NA	_ Screen Int	erva	ı			NA		Type/Size_	NA	
Casing: Dia.	N	<b>l</b> Α	_ Casing Int	erva	i			314		Type_	NA	
Fill Material			Ве	nto	nite	Chips	8		_			ush
Drill Co.		Interphase						Method_		Direct	Push	
Driller		Eric						Logged By	Ch	ris Rohlfing	, RG #7229	
Start Time/Date			12-16-04	0	746			End Time/Date		12-16-04	0830	
Sample ID	PID	Lithology	Well Const.	Driven	Recovery	Depth	USCS Class.		De	escription		
DP-1-1					1	SM	4" Concrete  SILTY SAND WITH GRAVEL: About 40% fine sand and 25%  medium sand, subangular to round; 20% fine gravel, angular to					
						3		subround; 15% silt;	yellow brown	, moist, no od	or.	
DP-1-5						5	sw	WELL GRADED SA medium sand, and fine gravel, angular	20% coarse s	and, subangu	lar to round; 20%	6
						8						
DP-1-10						9	SP	POORLY GRADED sand, subangular to yellow, moist, no od	round, micac			dium



Boring Number:					U	P-1		Page 2 of 2
Project			Hawker F	aci	fic			Client Hawker Pacific
Location	on					Valle	y, CA	Project No. 109398
Sample ID	PID	Lithology	Well Const.	Driven	Recovery	Depth	USCS Class.	Description
						11		
						13		
DP-1-15						15	SP	as above, rock (1.5") in core, moist, no odor.
						16		
						18		
DP-1-20						20	SP	as above, 70% fine sand, 30% medium sand, minor coarse sand, moist, no odor.
						22		
						23		
DP-1-25						25		as above, moist, no odor.  Total Depth = 25 feet, backfilled with bentonite chips



Boring Num	ber:				D	P-2			Page	1	of	2	
Project	Hawker Pacific Client_								Hawker Pacific				
Location	Sun Valley, CA											98	
Surface Elev.	NA Total Depth 2									East_			
Top of Casing		NA	_Water Level Initial								Boring Dia.	3"	
Screen: Dia.		1A	Screen Int	Screen Interval				NA		Type/Size_	NA		
Casing: Dia.		IA.	_ Casing Int	ıl			NA		Type_	NA			
Fill Material	Bentonite 0						3		Rig/Core	Geopro	be / Direct F	<sup>o</sup> ush	
Drill Co.			Interph	ase	∋			Method	Direc	ect push continuous core			
Driller			Erio	;				Logged By	j, RG #7229				
Start Time/Date	·····		12-16-04	0	835			End Time/Date	***************************************	12-16-04	0920		
Sample ID	PID	Lithology	Well Const.	Driven	Recovery	Depth	USCS Class.		De	scription			
					Ш			4" Concrete		-			
DP-2-1					Н	1	SM	SILTY SAND WITH	GRAVEL: AL	out 40% fine	sand and 25%		
				┡	Н			medium sand, suba				)	
					Н	2		subround; 15% silt;	yellow brown,	moist, no od	or.		
						3							
				***		4							
	-			₩							***************************************		
DP-2-5						5	SP	POORLY GRADED				ind	
					***	6		and 30% medium s			0% fine gravel,		
				▓	▩			angular to subround	, pale yellow,	dry, no odor.			
						7							
					▓								
						8		-					
					▓	9		POORLY GRADED				dium	
DP-2-10						10		sand, subangular to yellow, moist, no od		ous; minor fi	ne gravel, pale		



Boiling Manuel.						P-Z		Page 2 or 2
Project	· · · · · · · · · · · · · · · · · · ·		Hawker F	aci	fic			Client Hawker Pacific
Location				Sur	Valle	y, CA	Project No. 109398	
Sample ID	PID	Lithology	Well Const.	Driven	Recovery	Depth	USCS Class.	Description
				-		11		
						12		
						13		
						14		
DP-2-15						15	SP	POORLY GRADED SAND WITH GRAVEL: About 40% fine sand and 40% medium sand, subangular to round; 20% fine to medium gravel,
						16		angular to round; trace coarse sand, rock to 1.5", yellow brown,  dry, no odor.
						17		
						18		
						19		
DP-2-20						20		as above, dry, no odor.
						21		
						22		
						23		
						24		
DP-2-25					1	25		as above, dry, no odor.  Total Depth = 25 feet, backfilled with bentonite chips



Boring Num	ber:					P-3			Page _	1	of	2	
Project			Hawker I	Pac	ific		Hawker Pacific						
Location	Sun Valley, CA							\					
Surface Elev.								1		East_			
Top of Casing		NA_	_Water Level							Boring Dia.	3"		
Screen: Dia.		NA	Screen Int	Screen Interval				NA		Type/Size_	NA		
Casing: Dia.		IA_	Casing Interval					NA		Type_	NA		
Fill Material	Bentonite					Chips	3		Rig/Core_	Core Geoprobe / Direct Push			
Drill Co.			Interph	nase	)			Method		Direct	Push		
Driller			Erio	<u> </u>				_ Logged By	Chris Rohlfing, RG #7229				
Start Time/Date	<u></u>		12-16-04	0	936			_End Time/Date		12-16-04	1010		
Sample ID	PID	Lithology	Well Const.	Driven	Recovery	Depth	USCS Class.		De	scription			
DP-3-1						2	SM	4" Concrete SILTY SAND WITH medium sand, suba	angular to roun	nd; 20% fine g	ravel, angular to		
DP-3-5						4 5	\ Q₽	POORLY GRADED	CAND MATH	CDAVEL: A	point EOW fine and		
						6		and 40% medium s	and, subangul	ar to subroun		no	
						7							
DP-3-10						9		as above, minor silt,	less gravel, n	noist, no odor			



Boring Numi	рег:					P-3		Page <u>2</u> of <u>2</u>
Project			Hawker F	Paci	fic		wa	Client Hawker Pacific
Location			нип-лис	;	Sur	Valle	y, CA	Project No. 109398
Sample ID	PID	Lithology	Well Const.	Driven	Recovery	Depth	USCS Class.	Description
				L		11		
						12		
						12		
						13		
						_		
						14	-	
DP-3-15						15	SP	as above, moist, no odor.
						16		
						17		
					_	18		
				$\vdash$	-	40		
						19		
DP-3-20						20	SP	POORLY GRADED SAND: About 65% fine sand and 35% medium
								sand, subangular to subround; minor fine gravel, yellow brown,
	-				-	21		moist, no odor.
						22		
						23		
						24		
						24		
DP-3-25						25		as above, moist, no odor.
								Total Depth = 25 feet, backfilled with bentonite chips



Boring Num	ber:					P-4			Page _	1	of	2
Project			Hawker I	Pac	ific			Client		Hawker	Pacific	
Location					Sur	Valle	y, CA	<b>.</b>		Project No	10939	98
Surface Elev.	NA		_ Total Depti	h	2	5'	North	1		East_		
Top of Casing		IA_	_Water Level								Boring Dia	3"
Screen: Dia.		ĮA_	_ Screen Int	terva	ıl			NA		Type/Size_	NA	
Casing: Dia.		IA	_ Casing Int	terva	ıl		***************************************	NA		Type_	NA	
Fill Material			Be	nto	nite	Chips	3		Rig/Core Geoprobe / Direct Push			
Drill Co.			Interph	nase	∋			Method		Direct	Push	
Driller			Eric	2				Logged By	Chr	ris Rohlfing	g, RG #7229	
Start Time/Date	!		12-16-04	1	140			End Time/Date		12-16-04	1230	
Sample ID	PID	Lithology	Well Const.	Driven	Recovery	Depth	USCS Class.		De	scription		
								4" Concrete				
DP-4-1	_			-	H	1	SM	SILTY SAND WITH	GRAVEL: A	bout 40% fine	sand and 25%	
				⊩	$\vdash$			medium sand, suba				)
			<b> </b>	┢		2		subround; 15% silt;	yellow brown,	, moist, no od	lor.	
	-			┢		3						
				r	П		$\overline{}$				AAMIN	
						4						
				▩								
DP-4-5				₿	₩	5	SP	POORLY GRADED	SAND WITH	GRAVEL: A	bout 50% fine sa	and
				₩	$\vdash$			and 40% medium s		vo.s. vo.s		
				$\vdash$	$\vdash$	6		angular to subround	d; pale brown,	dry, no odor.		
					Н	7						
						8						
					Ц							
				***		9		as above, dry, no o	dor.			
DP-4-10						10			***************************************			



Boring Numb	er.				U	P-4		Page <u>2</u> of <u>2</u>
Project			Hawker F	aci	fic			Client Hawker Pacific
Location				;	Sun	Valle	y, CA	Project No. 109398
Sample ID	PID	Lithology	Well Const.	Driven	Recovery	Depth	USCS Class.	Description
						11		
						13		
DP-4-15						15	SP	POORLY GRADED SAND: About 55% fine sand and 45% medium sand, subangular to round; minor fine gravel, pale yellow, dry,
						16		no odor.
						18		
DP-4-20						20	SP	as above, dry, no odor.
						21		
						23		
DP-4-25						25		as above, increasing gravel, dry, no odor.  Total Depth = 25 feet, backfilled with bentonite chips

Boring Num	ber:				<u>D</u>	)P-5			Page _	1	of	2	
Project			Hawker F	Pac	ific			_ Client		Hawker	Pacific		
Location					Sun	ı Vall€	<u>∍y, CA</u>	\		Project No	10939	<del>9</del> 8	
Surface Elev.	NA		Total Depth					1		East_			
Top of Casing		NA.	_Water Level	Initia	al	N	1A	Static	NA		Boring Dia.	3"	
Screen: Dia.		1A	Screen Inte	terva	al			NA		Type/Size_	NA		
Casing: Dia.		NA.	Casing Inte	terva	al			NA		Type_	NA		
Fill Material			Ве	ntor	<u>nite</u>	Chips	S		Rig/Core	Geopro	bbe / Direct P	ush	
Drill Co.			Interph	ıas∈	<u> </u>			Method		Direct	Push		
Driller			Eric	<u> </u>				Logged By	Chr	ris Rohlfing	g, RG #7229		
Start Time/Date	·		12-16-04	1(	025			End Time/Date12-16-04 1135					
Sample ID	PID	Lithology	Well Const.	Driven	Recovery	Depth	USCS Class.		De	escription			
	-				$\square$			4" Concrete SILTY SAND WITH GRAVEL: About 40% fine sand and 25%					
DP-5-1				$\vdash$	H	1	SM			100 To a 100 March 100 March			
				H	H	2		medium sand, suba subround; 15% silt;	1141111			)	
				H				Sublourid, 1070 onc.	yenow brown,	moist, no sa	or.		
						3							
						4			- Hamilton				
DP-5-5			<b> </b>			5		POORLY GRADED				ind	
					H			and 40% medium sa					
	$\vdash$				H	6	$\vdash$	angular to subround	; pale brown,	dry, no odor.			
				H	1	7							
				H									
				П		8							
						9		as above, dry, no od	ior.				
DP-5-10				▩	▓	10							



Boring Number	er:				ט	P-5		Page 2 of 2
Project _			Hawker I	<sup>o</sup> aci	fic			Client Hawker Pacific
Location _					Sun	Valle	y, CA	Project No. 109398
Sample ID	PID	Lithology	Well Const.	Driven	Recovery	Depth	USCS Class.	Description
						11		
						13		
						14		
DP-5-15						16	SP	as above, increasing gravel percentage, dry, no odor.
						17		
						18		hard drilling at 18'
DP-5-20						20	SP	POORLY GRADED SAND WITH GRAVEL: About 50% fine sand 35% medium sand, subangular to round; 15% fine to medium gravel, angular to subround; dark yellow, dry, no odor.
						22		
						23		
DP-5-25						25		as above, dry, no odor.  Total Depth = 25 feet, backfilled with bentonite chips



Boring Num	mber: DP-6  Hawker Pacific								Page _	1	of	2
Project		·	Hawker I	Pac	ific			Client		Hawker	Pacific	·
Location					Sur	Valle	y, CA			Project No	10939	98
Surface Elev.	NA		Total Depth	١	2	5'	North	1		East_		
Top of Casing		ĮA	_Water Level	Initia	al		<b>I</b> A	Static	NA		Boring Dia	3"
Screen: Dia.		ĮA	Screen Int	erva	i			NA		Type/Size_	NA	
Casing: Dia.		ĮA	_ Casing Int	erva	ı			NA		Type_	NA	
Fill Material			Ве	nto	nite	Chips	3		Rig/Core	Geopro	obe / Direct F	Push
Drill Co.			Interph	ase	)			Method		Direct	Push	
Driller			Erio	;				Logged By	Chi	ris Rohlfing	g, RG #7229	
Start Time/Date			12-16-04	1:	310	····		End Time/Date		12-16-04	1400	
Sample ID	PID	Lithology	Well Const.	Driven	Recovery	Depth	USCS Class.		De	escription		TOWN S
				_	$\sqcup$			4" Concrete			- manufacture ( )	
DP-6-1	-			-	Н	1	SM	SILTY SAND WITH				
				$\vdash$	Н	2		medium sand, suba				)
								subround; 15% silt;	yellow brown,	, moist, no od	or.	
						3				444		
										*******		
						4						
DD 0.5				▩								
DP-6-5				▩		5	sw	WELL GRADED SA				
				▓	****	6		medium sand, and a fine gravel, angular				
				XXXX				3 1 - 3		,	, , , , , , , , , , , , , , , , , , ,	
						7						
										~ - × 11× 1111 - ×		
					-	8						
					$-\parallel$			SP POORLY GRADED SAND: About 50% fine sand and 50% medium				
				<b>***</b>	₩	9						dium
DP-6-10						10		sand, subangular to yellow, moist, no od		eous, minor fi	me gravei, pale	



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Boring Numb	er:		***************************************		D	P-6		Page 2 of 2
Project		······	Hawker	Paci	fic			Client Hawker Pacific
Location					Sur	Valle	y, CA	Project No. 109398
Sample ID	PID	Lithology	Well Const.	Driven	Recovery	Depth	USCS Class.	Description
						11		
						13		
DP-6-15						14	SP	as above, moist, no odor.
						16		
						18		
DP-6-20						20	SP	as above, 70% fine sand, 30% medium sand, minor coarse sand, moist, no odor.
						21		
						23		
DP-6-25						25		as above, moist, no odor.  Total Depth = 25 feet, backfilled with bentonite chips



Round Man	ber:					P-7			Page	1	of	2
Project			Hawker I	<sup>2</sup> ac	ific			Client_		Hawker F	<sup>o</sup> acific	
Location			***		Sur	Valle	y, CA			Project No	10939	)8
Surface Elev.	NA		_ Total Depth	١	2	5'	North			East		
Top of Casing	N	IA	_Water Level	Initia	al	N	IA	Static	NA		Boring Dia	3"
Screen: Dia.	N	IA	_ Screen Int	erva	ıl			NA		Type/Size	NA	
Casing: Dia.	N	IA	_ Casing Int	erva	1			NA		Туре	NA	
Fill Material			Ве	nto	nite	Chips	s		Rig/Core_	Geopro	be / Direct P	'ush
Drill Co.			Interph	ase	)			Method		Direct F	<sup>o</sup> ush	
Driller			Eric	>			****	Logged By	Chr	is Rohlfing	, RG #7229	
Start Time/Date			12-16-04	1.	400			End Time/Date		12-16-04	1430	
Sample ID	PID	Lithology	Well Const.	Driven	Recovery	Depth	USCS Class.		De	scription		
DP-7-1						2	SM	4" Concrete SILTY SAND WITH medium sand, suba	angular to roun	nd; 20% fine gr	ravel, angular to	
DP-7-5						5 6 7		POORLY GRADED and 40% medium s angular to subround	and, subangul	ar to subround		nd
DP-7-10						9		as above, dry, no od	dor.			



**F**...

Boring Numb	oer:					P-7		Page <u>2</u> of <u>2</u>
Project		***************************************	Hawker	Paci	fic			Client Hawker Pacific
Location					Sur	ı Valle	y, CA	Project No. 109398
Sample ID	PID	Lithology	Well Const.	Driven	Recovery	Depth	USCS Class.	Description
						11		
						13		
						14		
DP-7-15						15	SP	POORLY GRADED SAND: About 55% fine sand and 45% medium sand, subangular to round; minor fine gravel, pale yellow, dry, no odor.
						17		
						18		
DP-7-20						19	en.	
DF-1-20						21	SP	as above, dry, no odor.
						22		
						23		
DP-7-25						25		as above, increasing gravel, dry, no odor.  Total Depth = 25 feet, backfilled with bentonite chips



Boring Num	hber: DP-8  Hawker Pacific								Page _	1	of	2		
Project			Hawker I	⊃ac	ific		······	Client		Hawker	Pacific			
Location					Sur	Valle	ey, CA	1		Project No	10939	98		
Surface Elev.	NA		_ Total Depth	١	2	5'	North	1		East_				
Top of Casing		IA	_Water Level	Initia	al		<b>I</b> A	Static	NA		Boring Dia.	3"		
Screen: Dia.	N	IA	_ Screen Int	erva	ıl			NA		Type/Size_	NA			
Casing: Dia.		IA_	_ Casing Int	erva	ıl			NA		Type_	NA			
Fill Material			Ве	nto	nite	Chips	3		Rig/Core	Geopro	obe / Direct F	<sup>9</sup> ush		
Drill Co.			Interph	ase	<u> </u>			Method		Direct	Push			
Driller			Erio	;				Logged By	Chi	ris Rohlfinç	g, RG #7229			
Start Time/Date	!		12-16-04	1:	530			_End Time/Date		12-16-04	1605			
Sample ID	DIO	Lithology	Well Const.	Driven	Recovery	Depth	USCS Class.		De	scription				
								4" Concrete						
DP-8-1				_		1	SM	SILTY SAND WITH GRAVEL: About 40% fine sand and 25% medium sand, subangular to round; 20% fine gravel, angular to						
				H	Н	_						)		
					$\vdash$	2		subround; 15% silt;	yellow brown	moist, no od	or.			
						3								
				***		4								
				₩										
DP-8-5					***	5	SP	POORLY GRADED				ind		
						6		and 40% medium sa angular to subround						
				0000				angular to subround	, paic brown,	dry, no odor.				
	7													
	8													
								Carlo	Alleria					
	9							as above, dry, no od	lor.					
DP-8-10					▩▮	10								



**f** 

Boring Numi	ber:	*****			D	P-8		Page 2 of 2
Project			Hawker F	aci	fic			Client Hawker Pacific
Location				:	Sur	Valle	y, CA	Project No. 109398
Sample ID	PID	Lithology	Well Const.	Driven	Recovery	Depth	USCS Class.	Description
						11		
						12		
				_		13		
						14		
DP-8-15						15	SP	POORLY GRADED SAND: About 55% fine sand and 45% medium sand, subangular to round; minor fine gravel, pale yellow, dry,
						16		no odor.
						17		
						18		
						19		
DP-8-20						20	SP	as above, dry, no odor.
						21		
						23		
						24		
DP-8-25						25		as above, increasing gravel, dry, no odor.
		1						Total Depth = 25 feet, backfilled with bentonite chips



Boring Num	ber:					)P-9			Page _	1	of	2
Project			Hawker	Pac	ific		···	_ Client		Hawker	Pacific	
Location			· · · · · · · · · · · · · · · · · · ·		Sur	valle	ey, CA	<b>\</b>		Project No	10939	98
Surface Elev.	NA		Total Depti					ì		East_		
Top of Casing		IA_	Water Level	Initia	al		۱A	Static	NA		Boring Dia.	3"
Screen: Dia.	N	IA	Screen Int	terva	ıl	_		NA		Type/Size_	NA	
Casing: Dia.		IA	Casing Inf	terva	ıl			NA		Туре	NA	
Fill Material			Ве	nto	nite	Chips	3		Rig/Core_	Geopro	be / Direct P	ush'
Drill Co.			Interph	nase	)			Method		Direct I	Push	
Driller			Erio	2				Logged By	Chi	ris Rohlfing	j, RG #7229	,
Start Time/Date			12-16-04	1.	445		-	End Time/Date12-16-04 1520				
Sample ID	PID	Lithology	Well Const.	Driven	Recovery	Depth	USCS Class.		De	escription		
DP-9-1		We Litt Pic					SM	4" Concrete SILTY SAND WITH medium sand, suba	angular to rour	nd; 20% fine g	ravel, angular to	)
DP-9-5						5 6 7	SP	POORLY GRADED and 40% medium s angular to subround	and, subangul	lar to subround		ind
DP-9-10						9		as above, dry, no od	dor.			



Boring Numb	er:				D	P-9		Pag	ge <u>2</u>	of	2
Project			Hawker F	<sup>2</sup> aci	fic			Client	Hawker P	acific 'acific	
Location					Sun	Valle	y, CA		Project No	109398	В
Sample ID	PID	Lithology	Well Const.	Driven	Recovery	Depth	USCS Class.		Description		
						11					
						13					
DP-9-15						14	SP	POORLY GRADED SAND:	About 55% fine san	nd and 45% med	dium
						16		sand, subangular to round; no odor.			
						17					
DD 0 00						19		V = =			
DP-9-20						21	SP	as above, dry, no odor.			
						22					
						24					
DP-9-25						25		as above, increasing gravel, Total Depth = 25 feet, backfil		hips	



Boring Numb	ber: DP-1								Page _	1	of	2	
Project			Hawker F	oac	ific			Client		Hawker	Pacific		
Location					Sun	Valle	y, CA			Project No	10939	)8	
Surface Elev.	NA		Total Depth	l	2!	5'	North	1		East_			
Top of Casing		IA.	_Water Level	Initia	ai		1A	Static	NA		Boring Dia.	3"	
Screen: Dia.		<b>I</b> A	Screen Inte	erva	ıl			NA		Type/Size_	NA		
Casing: Dia.	N	IA	_ Casing Inte	erva	ı			NA		Туре	NA		
Fill Material	***************************************		Bei	ntoı	nite	Chips	3		Rig/Core	tig/CoreGeoprobe / Direct Push			
Drill Co.			Interph	as∈	<u> </u>			Method		Direct	Push		
Driller			Eric	;		······································		Logged By	Chr	is Rohlfinç	g, RG #7229		
Start Time/Date			12-17-04	06	625			End Time/Date		12-17-04	0700		
Sample ID	PID	Lithology	Well Const.	Driven	Recovery	Depth	USCS Class.		De	scription			
								4" Concrete					
DP-10-1				_	$\square$	1	SM	SILTY SAND WITH	GRAVEL: A	oout 40% fine	sand and 25%		
				H	H		_	medium sand, suba	1.00			)	
					H	2		subround; 15% silt;	yellow brown,	moist, no od	or.		
					$\vdash$	3							
					H	3							
						4							
DP-10-5						5	sw	WELL GRADED SA	ND WITH GR	AVEL: Abou	t 30% fine sand,	30%	
								medium sand, and 2	20% coarse sa	and, subangu	lar to round; 20%	6	
						6		fine gravel, angular	to round; light	yellowish bro	own, dry, no odo	r.	
				$\vdash \mid$	$\vdash$								
				H	-	7							
							$\rightarrow$						
						8							
						9	SP	POORLY GRADED	SAND: Abou	t 50% fine sa	nd and 50% med	dium	
				▩	▩	Ť		sand, subangular to				aiditi	
DP-10-10				▩		10		yellow, moist, no ode					



Boring Numb	er:	DP-10							Page _	2	of .	2
Project			Hawker I	aci	fic			Client		Hawker I	Pacific	
Location			······································		Sun	Valle	y, CA			Project No	109	398
Sample ID	PID	Lithology	Well Const.	Driven	Recovery	Depth	USCS Class.		De	escription		
					H	11	_					
				H		12						
						12						
						13						
				L	_							
						14						
DP-10-15						15	SP	as above, moist, no od	ior.			
					Ш	16						
				L	H							
				H	Н	17						
					П	18				-		
						19	_					
DD 40 00							-					
DP-10-20						20	SP	as above, 70% fine sar moist, no odor.	nd, 30% m	edium sand, n	ninor coarse s	sand,
						21		inoist, no oddr.				
				Ш		22						
	-			H	_		_					
						23						
						24						
									~~			
DP-10-25						25	SP	as above, moist, no od	or.			
								Total Depth = 25 feet, t	backfilled v	vith bentonite	chips	



BOING NUM	DCI.		······································						raye		OI	
Project			Hawker F	Paci	ific			Client_	Hav	vker P	acific	
Location				,	Sun	Valle	y, CA		Projec	t No	10939	88
Surface Elev.	NA		Total Depth	١	2	5'	North			East		
Top of Casing	N	IA	Water Level	Initia	ıl		IA	Static	NA		Boring Dia.	3"
Screen: Dia.	N	IA	Screen Int	erva	I			NA	Туре	/Size	NA	
Casing: Dia.	N	IA	_ Casing Int	erva	I					Туре	NA	
Fill Material	L.i.		Ве	ntor	nite	Chips	3		Rig/CoreG	eoprot	oe / Direct P	ush
Drill Co.			Interph	ase	<u> </u>			Method	Direct pus	h conf	tinuous core	•
Driller			Eric	>				Logged By	Chris Ro	hlfing,	RG #7229	
Start Time/Date	788779		12-17-04	07	750			End Time/Date	12-1	7-04	0825	
Sample ID	PID	Lithology	Well Const.	Driven	Recovery	Depth	USCS Class.		Descript	ion		
DP-11-1						1	SM		H GRAVEL: About 40			
						2		subround; 15% silt	; yellow brown, moist,	no odo	r.	
				-	Н	3						
		SECOND										
					***	4						
DP-11-5					×	5	SP	POORLY GRADE	SAND WITH GRAVI	FI · Ab	out 50% fine sa	nd
						-			sand, subangular to ro			iid .
						6			d; pale yellow, dry, no			
				₩		7						
				▩	▓							
				▩		8	L					
				▩								
						9	SP	POORLY GRADED	SAND: About 50% f	ine san	d and 50% med	dium
								sand, subangular to	o round, micaceous; n	ninor fin	e gravel, pale	
DP-11-10				▩	▩	10		yellow, moist, no od	dor.			



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Boiling Hunni					<u> </u>	-11		Page 2 Of 2
Project		<del>-</del>	Hawker F	aci	fic		***************************************	Client Hawker Pacific
Location					Sun	Valle	y, CA	Project No109398
Sample ID	PID	Lithology	Well Const.	Driven	Recovery	Depth	USCS Class.	Description
						11 12 13 14		
DP-11-15						15 16 17 18	SP	POORLY GRADED SAND WITH GRAVEL: About 40% fine sand and 40% medium sand, subangular to round; 20% fine to medium gravel, angular to round; trace coarse sand, rock to 1.5", yellow brown, dry, no odor.
DP-11-20						21 22 23 24		as above, dry, no odor.
DP-11-25						25		as above, dry, no odor.  Total Depth = 25 feet, backfilled with bentonite chips



Boring Numb	ber:				DI	P-12			Page_	1	of	2
Project			Hawker I	Pac	ific			Client		Hawker	Pacific	
Location				,	Sun	Valle	y, CA			Project No	10939	98
Surface Elev.	NA		Total Depth	١	2	5'	North	1	····	East_		
Top of Casing		<b>I</b> A	_Water Level	Initia	ıi	٨	IA	Static	NA		Boring Dia.	3"
Screen: Dia.	N	1A	Screen Int	erva	i			NA		Type/Size_	NA	
Casing: Dia.	N	IA	Casing Int	erva	I			NA		Туре_	NA	
Fill Material			Ве	nto	nite	Chips	3		Rig/Core	Geopro	be / Direct F	<sup>2</sup> ush
Drill Co.			Interph	nase	<u> </u>			Method		Direct	Push	
Driller			Eric	<u> </u>				Logged By	Chi	ris Rohlfing	ı, RG #7229	
Start Time/Date			12-17-04	08	335			End Time/Date		12-17-04	0955	
Sample ID	PID	Lithology	Well Const.	Driven	Recovery	Depth	USCS Class.		De	escription		
				L	Н			4" asphalt, 6" base				
DP-12-1				-	Н	1	SM	SILTY SAND WITH				
			-		Н	2		medium sand, suba subround; 15% silt;	man year			)
								addicana, 1070 Sin,	yellen elemi	, moist, no oc	VI.	
						3						
						4						
DD 40.5							-					
DP-12-5					***	5	SW	WELL GRADED SA medium sand, and 2				
				▩		6		fine gravel, angular			-	
											,,,	
						7						
				Ш								
					-	8						
				Н	$\dashv$					TWINDS AND AM	M 200000000	
					₩	9	SP	POORLY GRADED				dium
DP-12-10						10		sand, subangular to yellow, moist, no ode		eous, minor n	ne graver, pale	



Boring Numb	er:				DF	P-12		Page 2 of 2
Project			Hawker F	aci	fic			Client Hawker Pacific
Location				;	Sun	Valle	y, CA	Project No109398
Sample ID	PID	Lithology	Well Const.	Driven	Recovery	Depth	USCS Class.	Description
						11		
						13		
DP-12-15						14	SP	as above, moist, no odor.
						16		
						17		
55.40.00						19		
DP-12-20						21	SP	as above, 70% fine sand, 30% medium sand, minor coarse sand, moist, no odor.
						22		
						23		
DP-12-25						25		as above, moist, no odor.  Total Depth = 25 feet, backfilled with bentonite chips



Boring Numi	ber:				וט	P-13			Page _	1	of	2
Project			Hawker F	Paci	ific			Client		Hawker I	Pacific	
Location				;	Sun	Valle	y, CA			Project No	10939	8
Surface Elev.	NA		Total Depth	1	2	5'	North		····	East_		
Top of Casing		1A	Water Level	Initia	al		IA	Static	NA		Boring Dia.	3"
Screen: Dia.	N	lΑ	Screen Int	erva	l			NA		Type/Size_	NA	
Casing: Dia.		IA.	_ Casing Int	erva	1	ı		NA			NA	
Fill Material			Ве	ntor	nite	Chips	3		Rig/Core Geoprobe / Direct			ush
Drill Co.			Interph	ase	<b>)</b>			Method		Direct F	<sup>2</sup> ush	
Driller			Erio	;				Logged By	Chi	ris Rohlfing	, RG #7229	
Start Time/Date			12-17-04	10	005			End Time/Date	····	12-17-04	1040	
Sample ID	PID	Lithology	Well Const.	Driven	Recovery	Depth	USCS Class.		De	escription		
DP-13-1						2	SM	4" asphalt, 6" base SILTY SAND WITH medium sand, suba subround; 15% silt,	I GRAVEL: Al	nd; 20% fine g	ravel, angular to	)
DP-13-5						4 5	SP	POORLY GRADED				ind
						7		angular to subround				
				***		9		as above, dry, no od	dor.			
DP-13-10						10						



Boring Numb	er:				DI	2-13		Page 2 of 2
Project			Hawker F	aci	fic			Client Hawker Pacific
Location	<del></del>			,	Sun	Valle	y, CA	Project No. 109398
Sample ID	PID	Lithology	Well Const.	Driven	Recovery	Depth	USCS Class.	Description
						11		
						13		
DP-13-15						14	SP	POORLY GRADED SAND: About 55% fine sand and 45% medium
						16		sand, subangular to round; minor fine gravel, pale yellow, dry, no odor.
						17		
						19		
DP-13-20						21	SP	as above, dry, no odor.
						22		
						23		
DP-13-25						25		as above, increasing gravel, dry, no odor.  Total Depth = 25 feet, backfilled with bentonite chips

# APPENDIX B LABORATORY REPORTS



Submission#: 2004-12-0729

**STL Los Angeles** 

January 04, 2005

1721 South Grand Avenue Santa Ana, CA 92705

Attn.:

#n.

#KI

Sabina Sudoko

Project:

E4L190115

Dear Ms. Sudoko,

Attached is our report for your samples received on 12/21/2004 10:10 This report has been reviewed and approved for release. Reproduction of this report is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after 02/04/2005 unless you have requested otherwise.

We appreciate the opportunity to be of service to you. If you have any questions, please call me at (925) 484-1919.

You can also contact me via email. My email address is: dsharma@stl-inc.com

Sincerely,

Dimple Sharma Project Manager

haema



Submission: 2004-12-0729

#### Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L190115 Received: 12/21/2004 10:10

#### **Samples Reported**

Sample Name	Date Sampled	Matrix	Lab#
DP-10-1	12/17/2004 06:27	Soil	1
DP-10-5	12/17/2004 06:29	Soil	2
DP-10-10	12/17/2004 06:32	Soil	3
DP-10-15	12/17/2004 06:37	Soil	4
DP-10-20	12/17/2004 06:43	Soil	5
DP-10-25	12/17/2004 06:52	Soil	6
BG-1-10	12/17/2004 07:36	Soil	7
DP-11-1	12/17/2004 07:54	Soil	8
DP-11-5	12/17/2004 07:57	Soil	9
DP-11-10	12/17/2004 08:01	Soil	10
DP-11-15	12/17/2004 08:06	Soil	11
DP-11-20	12/17/2004 08:13	Soil	12
DP-11-25	12/17/2004 08:24	Soil	13
BG-2-1	12/17/2004 08:44	Soil	14
BG-2-10	12/17/2004 08:52	Soil	15
DP-12-1	12/17/2004 09:22	Soil	16
DP-12-5	12/17/2004 09:25	Soil	17
DP-12-10	12/17/2004 09:29	Soil	18
DP-12-15	12/17/2004 09:35	Soil	19
DP-12-20	12/17/2004 09:41	Soil	20
DP-12-25	12/17/2004 09:51	Soil	21
DP-13-1	12/17/2004 10:07	Soil	22
DP-13-5	12/17/2004 10:11	Soil	23
DP-13-10	12/17/2004 10:17	Soil	24
DP-13-15	12/17/2004 10:20	Soil	25
DP-13-20	12/17/2004 10:24	Soil	26
DP-13-25	12/17/2004 10:31	Soil	27
EB-121704	12/17/2004 08:31	Water	28



Submission: 2004-12-0729

#### Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L190115 Received: 12/21/2004 10:10

Prep(s): 7471A Test(s): 7471A

Sample ID: **DP-10-1** Lab ID: 2004-12-0729 - 1 Sampled: 12/17/2004 06:27 Extracted: 12/21/2004 14:58

Matrix: Soil QC Batch#: 2004/12/21-03.16

Analysis Flag: . ( See Legend and Note Section )

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Mercury	ND	0.050	mg/Kg	1.00	12/22/2004 09:28	

100



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Submission: 2004-12-0729

#### Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L190115

Received: 12/21/2004 10:10

Prep(s): 7471A Test(s): 7471A

Sample ID: **DP-10-5** Lab ID: 2004-12-0729 - 2

Sampled: 12/17/2004 06:29 Extracted: 12/21/2004 14:58

Matrix: Soil QC Batch#: 2004/12/21-03.16

 Compound
 Conc.
 RL
 Unit
 Dilution
 Analyzed
 Flag

 Mercury
 ND
 0.050
 mg/Kg
 1.00
 12/22/2004 09:31



¢.

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Submission: 2004-12-0729

#### Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

12/17/2004 06:32

Project: E4L190115

Sampled:

Received: 12/21/2004 10:10

Extracted:

12/21/2004 14:58

Prep(s): 7471A Test(s): 7471A

Sample ID: **DP-10-10** Lab ID: 2004-12-0729 - 3

Matrix: Soil QC Batch#: 2004/12/21-03.16

CompoundConc.RLUnitDilutionAnalyzedFlagMercuryND0.050mg/Kg1.0012/22/2004 09:33



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Submission: 2004-12-0729

#### Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L190115

Received: 12/21/2004 10:10

Extracted:

7471A

12/21/2004 14:58

Prep(s): 7471A Test(s):

Sample ID: DP-10-15 Lab ID: 2004-12-0729 - 4 Sampled: 12/17/2004 06:37

Matrix: Soil QC Batch#: 2004/12/21-03.16

Compound Conc. RL Unit Dilution Analyzed Flag Mercury ND 0.050 mg/Kg 1.00 12/22/2004 09:34



Submission: 2004-12-0729

#### Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L190115

Matrix:

.

Received: 12/21/2004 10:10

Prep(s): 7471A

Sample ID: DP-10-20

Sampled: 12/17/2004 06:43

Soil

Test(s): 7471A

Lab ID: 2004

2004-12-0729 - 5

Extracted:

12/21/2004 14:58

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Mercury	ND	0.050	mg/Kg	1.00	12/22/2004 09:35	



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. 3

Submission: 2004-12-0729

#### Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L190115

Received: 12/21/2004 10:10

Prep(s): 7471A Test(s): 7471A

Sample ID: **DP-10-25** Lab ID: 2004-12-0729 - 6
Sampled: 12/17/2004 06:52 Extracted: 12/21/2004 14:58

Matrix: Soil QC Batch#: 2004/12/21-03.16

 Compound
 Conc.
 RL
 Unit
 Dilution
 Analyzed
 Flag

 Mercury
 ND
 0.050
 mg/Kg
 1.00
 12/22/2004 09:39



Submission: 2004-12-0729

#### Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L190115

Sampled:

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Received: 12/21/2004 10:10

Prep(s): 7471A

Sample ID: BG-1-10

12/17/2004 07:36

Matrix: Soil

Test(s):

7471A

Lab ID:

2004-12-0729 - 7

Extracted:

12/21/2004 14:58

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Mercury	ND	0.050	mg/Kg	1.00	12/22/2004 09:40	



Submission: 2004-12-0729

#### Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana. CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L190115

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Received: 12/21/2004 10:10

Prep(s): 7471A Test(s): 7471A

Sample ID: **DP-11-1** Lab ID: 2004-12-0729 - 8
Sampled: 12/17/2004 07:54 Extracted: 12/21/2004 14:58

Matrix: Soil QC Batch#: 2004/12/21-03.16

 Compound
 Conc.
 RL
 Unit
 Dilution
 Analyzed
 Flag

 Mercury
 ND
 0.050
 mg/Kg
 1.00
 12/22/2004 09:41



3

Submission: 2004-12-0729

#### Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L190115

Received: 12/21/2004 10:10

Prep(s): 7471A

Sample ID: DP-11-5

Sampled: 12/17/2004 07:57

Matrix: Soil

Test(s): 7471A

Lab ID:

2004-12-0729 - 9

Extracted:

12/21/2004 14:58

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Mercury	ND	0.050	mg/Kg	1.00	12/22/2004 09:42	



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Submission: 2004-12-0729

#### Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L190115

Received: 12/21/2004 10:10

Prep(s):

7471A

Sample ID: DP-11-10

Test(s):

7471A

12/17/2004 08:01

Lab ID:

2004-12-0729 - 10

Sampled: Matrix:

Soil

Extracted:

12/21/2004 14:58

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Mercury	ND	0.050	mg/Kg	1.00	12/22/2004 09:43	



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Submission: 2004-12-0729

#### Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L190115

Received: 12/21/2004 10:10

Prep(s): 7471A

Sample ID: **DP-11-15** 

12/17/2004 08:06

Matrix: Soil

Sampled:

Test(s): 7471A

Lab ID: 2004-12-0729 - 11

Extracted: 12/21/2004 14:58

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Mercury	ND	0.050	mg/Kg	1.00	12/22/2004 09:45	



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Submission: 2004-12-0729

#### Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L190115

Received: 12/21/2004 10:10

Prep(s): 7471A

Sample ID: DP-11-20

Sampled: 12/17/2004 08:13

Matrix: Soil

Test(s): 7471A

Lab ID: 2004-12-0729 - 12

Extracted: 12/21/2004 14:58

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Mercury	ND	0.050	mg/Kg	1.00	12/22/2004 09:46	



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Submission: 2004-12-0729

# Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L190115

Received: 12/21/2004 10:10

Prep(s):

7471A

Test(s):

7471A

Sample ID: DP-11-25

Lab ID:

2004-12-0729 - 13

Sampled:

12/17/2004 08:24

Extracted:

12/21/2004 14:58

Matrix:

Soil

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Mercury	ND	0.050	mg/Kg	1.00	12/22/2004 09:47	



### Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L190115

Received: 12/21/2004 10:10

Prep(s): 7471A

Sample ID: BG-2-1

Sampled: 12/17/2004 08:44

Matrix: Soil Test(s): 7471A

Lab ID:

2004-12-0729 - 14

Extracted:

12/21/2004 14:58

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Mercury	ND	0.050	mg/Kg	1.00	12/22/2004 09:48	



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Submission: 2004-12-0729

### Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L190115

Received: 12/21/2004 10:10

Prep(s): 7471A

Test(s):

7471A

Sample ID: BG-2-10

Lab ID:

2004-12-0729 - 15

Sampled: 12/17/2004 08:52 Matrix:

Soil

Extracted:

12/21/2004 14:58

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Mercury	ND	0.050	mg/Kg	1.00	12/22/2004 09:50	



(

Submission: 2004-12-0729

# Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L190115

Received: 12/21/2004 10:10

Prep(s): 7471A

Sample ID: DP-12-1

Sampled: 12/17/2004 09:22

Matrix: Soil

Test(s): 7471A

Lab ID:

2004-12-0729 - 16

Extracted:

12/21/2004 14:58

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Mercury	ND	0.050	mg/Kg	1.00	12/22/2004 09:53	



.

Submission: 2004-12-0729

### Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L190115

Received: 12/21/2004 10:10

Prep(s): 7471A

Sample ID: DP-12-5

Sampled: 12/17/2004 09:25

Matrix: Soil

Test(s): 7471A

Lab ID:

2004-12-0729 - 17

Extracted:

12/21/2004 14:58

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Mercury		0.050	mg/Kg	1.00	12/22/2004 09:55	



e ...

Submission: 2004-12-0729

### Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L190115

Received: 12/21/2004 10:10

Prep(s): 7471A Test(s): 7471A

Sample ID: **DP-12-10** Lab ID: 2004-12-0729 - 18
Sampled: 12/17/2004 09:29 Extracted: 12/21/2004 14:58

Matrix: Soil QC Batch#: 2004/12/21-03.16

 Compound
 Conc.
 RL
 Unit
 Dilution
 Analyzed
 Flag

 Mercury
 ND
 0.050
 mg/Kg
 1.00
 12/22/2004 09:56



Submission: 2004-12-0729

### Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L190115

Received: 12/21/2004 10:10

Prep(s): 7471A

Sample ID: DP-12-15

Sampled: 12/17/2004 09:35

Matrix: Soil

Test(s): 7471A

Lab ID: 2004-12-0729 - 19

Extracted: 12/21/2004 14:58

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Mercury	ND	0.050	mg/Kg	1.00	12/22/2004 09:57	



Submission: 2004-12-0729

### Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L190115

Received: 12/21/2004 10:10

Prep(s):

7471A

Test(s):

7471A

Sample ID: DP-12-20

Lab ID:

2004-12-0729 - 20

Sampled: 12/17/2004 09:41

Extracted:

12/21/2004 14:58

Matrix:

Soil

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Mercury	ND	0.050	mg/Kg	1.00	12/22/2004 09:58	



Submission: 2004-12-0729

### Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L190115

Received: 12/21/2004 10:10

Prep(s): 7471A

Sample ID: DP-12-25

Sampled: 12/17/2004 09:51

Matrix: Soil

Test(s):

7471A

2004-12-0729 - 21

Extracted:

Lab ID:

12/21/2004 15:51

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Mercury	ND	0.050	mg/Kg	1.00	12/22/2004 10:03	



£11.

Submission: 2004-12-0729

### Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L190115 Received: 12/21/2004 10:10

Prep(s): 7471A Test(s): 7471A

Sample ID: **DP-13-1** Lab ID: 2004-12-0729 - 22

Sampled: 12/17/2004 10:07 Extracted: 12/21/2004 15:51

Matrix: Soil QC Batch#: 2004/12/21-04.16

 Compound
 Conc.
 RL
 Unit
 Dilution
 Analyzed
 Flag

 Mercury
 ND
 0.050
 mg/Kg
 1.00
 12/22/2004 10:09



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7.

Submission: 2004-12-0729

### Mercury (Hg)

Received: 12/21/2004 10:10

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L190115

Prep(s): 7471A Test(s): 7471A

Sample ID: **DP-13-5** Lab ID: 2004-12-0729 - 23

Sampled: 12/17/2004 10:11 Extracted: 12/21/2004 15:51 Matrix: Soil QC Batch#: 2004/12/21-04.16

CompoundConc.RLUnitDilutionAnalyzedFlagMercuryND0.050mg/Kg1.0012/22/2004 10:10



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Submission: 2004-12-0729

# Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L190115

Received: 12/21/2004 10:10

Prep(s): 7471A

Sample ID: DP-13-10

Sampled: 12/17/2004 10:17

Matrix: Soil

Test(s): 7471A

Lab ID: 2004-12-0729 - 24

Extracted: 12/21/2004 15:51

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Mercury	ND	0.050	mg/Kg	1.00	12/22/2004 10:11	



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Submission: 2004-12-0729

### Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L190115

Received: 12/21/2004 10:10

Prep(s):

7471A

Test(s):

7471A

Sample ID: DP-13-15

Lab ID:

2004-12-0729 - 25

Sampled:

12/17/2004 10:20

Extracted:

12/21/2004 15:51

Matrix:

Soil

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Mercury	ND	0.050	mg/Kg	1.00	12/22/2004 10:13	



Submission: 2004-12-0729

### Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L190115

Received: 12/21/2004 10:10

Prep(s): 7471A Test(s): 7471A

Sample ID: **DP-13-20** Lab ID: 2004-12-0729 - 26

Sampled: 12/17/2004 10:24 Extracted: 12/21/2004 15:51

Matrix: Soil QC Batch#: 2004/12/21-04.16

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Mercury	ND	0.050	mg/Kg	1.00	12/22/2004 10:14	



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Submission: 2004-12-0729

### Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L190115 Received: 12/21/2004 10:10

Prep(s): 7471A Test(s): 7471A

Sample ID: **DP-13-25** Lab ID: 2004-12-0729 - 27

Sampled: 12/17/2004 10:31 Extracted: 12/21/2004 15:51

Matrix: Soil QC Batch#: 2004/12/21-04.16

CompoundConc.RLUnitDilutionAnalyzedFlagMercuryND0.050mg/Kg1.0012/22/2004 10:15



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Submission: 2004-12-0729

# Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L190115

Received: 12/21/2004 10:10

Prep(s): 7470A

Test(s):

7470A

Sample ID: EB-121704

Lab ID:

2004-12-0729 - 28

Sampled:

12/17/2004 08:31

Extracted:

12/22/2004 10:24

Matrix:

Water

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Mercury	ND	0.00020	mg/L	1.00	12/27/2004 09:31	



Submission: 2004-12-0729

# Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L190115

Received: 12/21/2004 10:10

### **Batch QC Report**

Prep(s): 7471A

**Method Blank** 

Soil

Test(s): 7471A QC Batch # 2004/12/21-03.16

Date Extracted: 12/21/2004 14:58

MB: 2004/12/21-03.16-011

Date Extraolog: 12/2 //2004 14:00

Compound	Conc.	RL	Unit	Analyzed	Flag
Mercury	ND	0.050	mg/Kg	12/22/2004 09:24	



### Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L190115

Received: 12/21/2004 10:10

#### **Batch QC Report**

Prep(s): 7471A

**Method Blank** 

Soil

Test(s): 7471A QC Batch # 2004/12/21-04.16

MB: 2004/12/21-04.16-040

Date Extracted: 12/21/2004 15:51

Compound	Conc.	RL	Unit	Analyzed	Flag
Mercury	ND	0.050	mg/Kg	12/22/2004 09:59	



Submission: 2004-12-0729

# Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L190115

Received: 12/21/2004 10:10

#### **Batch QC Report**

Prep(s): 7470A

**Method Blank** 

MB: 2004/12/22-05.16-104

Water

Test(s): 7470A

QC Batch # 2004/12/22-05.16

Date Extracted: 12/22/2004 10:24

Compound	Conc.	RL	Unit	Analyzed	Flag
Mercury	ND	0.0002	mg/L	12/27/2004 09:27	



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Submission: 2004-12-0729

# Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L190115

Received: 12/21/2004 10:10

### **Batch QC Report**

Prep(s): 7471A

Test(s): 7471A

**Laboratory Control Spike** 

Soil

QC Batch # 2004/12/21-03.16

LCS

2004/12/21-03.16-012

Extracted: 12/21/2004

Analyzed: 12/22/2004 09:25

LCSD

2004/12/21-03.16-013

Extracted: 12/21/2004

Analyzed: 12/22/2004 09:26

Compound	Conc.	mg/Kg	Exp.Conc.	Recovery %		RPD	Ctrl.Lim	nits %	Fla	ags
•	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Mercury	0.521	0.522	0.500	104.2	104.4	0.2	85-115	20		



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Submission: 2004-12-0729

### Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L190115

Received: 12/21/2004 10:10

#### **Batch QC Report**

Prep(s): 7471A Test(s): 7471A

Soil

**Laboratory Control Spike** 

QC Batch # 2004/12/21-04.16

LCS

2004/12/21-04.16-041

Extracted: 12/21/2004

Analyzed: 12/22/2004 10:01

LCSD

2004/12/21-04.16-042

Extracted: 12/21/2004

Analyzed: 12/22/2004 10:02

Compound	Conc.	mg/Kg	Exp.Conc.	Recov	ery %	RPD	Ctrl.Lim	nits %	Fla	igs
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Mercury	0.524	0.531	0.500	104.8	106.2	1.3	85-115	20		



Submission: 2004-12-0729

### Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L190115

Received: 12/21/2004 10:10

### **Batch QC Report**

Prep(s): 7470A

Test(s): 7470A

**Laboratory Control Spike** 

Water

QC Batch # 2004/12/22-05.16

LCS

2004/12/22-05.16-105

Extracted: 12/22/2004

Analyzed: 12/27/2004 09:29

LCSD

2004/12/22-05.16-106

Extracted: 12/22/2004

Analyzed: 12/27/2004 09:30

Compound	Conc.	mg/L	Exp.Conc.	Recov	ery %	RPD	Ctrl.Lim	nits %	Fla	igs
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Mercury	0.0195	0.0193	0.0200	97.5	96.5	1.0	85-115	20		



Submission: 2004-12-0729

# Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L190115

Received: 12/21/2004 10:10

	Batch QC Report		
Prep(s): 7471A			Test(s): 7471A
Matrix Spike ( MS / MSD )	Soil	QC Bat	ch # 2004/12/21-03.16
DP-10-1 >> MS		Lab ID:	2004-12-0729 - 001
MS: 2004/12/21-03.16-015	Extracted: 12/21/2004	Analyzed: Dilution:	12/22/2004 09:29 1.00
MSD: 2004/12/21-03.16-016	Extracted: 12/21/2004	Analyzed: Dilution:	12/22/2004 09:30

Compound	Conc.	mg	/Kg	Spk.Level	Re	ecovery	%	Limits	%	Fla	ags
	MS	MSD	Sample	mg/Kg	MS	MSD	RPD	Rec.	RPD	MS	MSD
Mercury	0.547	0.533	ND	0.490	111.6	107.7	3.6	85-115	20		



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Submission: 2004-12-0729

# Mercury (Hg)

Received: 12/21/2004 10:10

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L190115

		Batch QC Report		
Prep(s):	7471A			Test(s): 7471A
Matrix S	Spike ( MS / MSD )	Soil	QC Bat	ch # 2004/12/21-04.16
DP-12-2	25 >> MS		Lab ID:	2004-12-0729 - 021
MS:	2004/12/21-04.16-044	Extracted: 12/21/2004	Analyzed:	12/22/2004 10:04
			Dilution:	1.00
MSD:	2004/12/21-04.16-047	Extracted: 12/21/2004	Analyzed:	12/22/2004 10:08
			Dilution:	1.00

Compound	Conc.	mç	ı/Kg	Spk.Level	R	ecovery	%	Limits	%	Fi	ags
•	MS	MSD	Sample	mg/Kg	MS	MSD	RPD	Rec.	RPD	MS	MSD
Mercury	0.556	0.569	ND	0.500	111.2	116.1	4.3	85-115	20		M4



2"

Submission: 2004-12-0729

# Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L190115

Received: 12/21/2004 10:10

### **Batch QC Report**

Prep(s): 7470A Test(s): 7470A

Matrix Spike ( MS / MSD ) Water QC Batch # 2004/12/22-05.16

MS/MSD Lab ID: 2004-12-0724 - 001

MS: 2004/12/22-05.16-113 Extracted: 12/22/2004 Analyzed: 12/27/2004 09:38

Dilution: 1,00

MSD: 2004/12/22-05.16-114 Extracted: 12/22/2004 Analyzed: 12/27/2004 09:40

Dilution: 1.00

	Compound	Conc.	mg	/L	Spk.Level	R	ecovery	%	Limits	%	Fi	ags
L		MS	MSD	Sample	mg/L	MS	MSD	RPD	Rec.	RPD	MS	MSD
	Mercury	0.0193	0.0194	ND	0.0200	96.5	97.0	0.5	85-115	20		



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Submission: 2004-12-0729

# Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L190115

Received: 12/21/2004 10:10

### **Legend and Notes**

#### **Analysis Flag**

#### **Result Flag**

M4

MS/MSD spike recoveries were above acceptance limits. See blank spike (LCS).

Metals - ICP/MS

STL Los Angeles

Attn.: Sabina Sudoko 1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L190115

SEVERN
TRENT
LABORATORY

STL San Francisco 1220 Quarry Lane Pleasanton, CA 94566

Tel: (925) 484-1919 Fax: (925) 484-1096 www.stl-inc.com www.chromalab.com

CA DHS ELAP# 2496

### Samples Reported

Received: 12/21/2004 10:10

Sample Name	Date Sampled	Matrix	Lab#
DP-10-1	12/17/2004 06:27	Soil	1
DP-10-5	12/17/2004 06:29	Soil	2
DP-10-10	12/17/2004 06:32	Soil	3
DP-10-15	12/17/2004 06:37	Soil	4
DP-10-20	12/17/2004 06:43	Soil	5
DP-10-25	12/17/2004 06:52	Soil	6
BG-1-10	12/17/2004 07:36	Soil	7
DP-11-1	12/17/2004 07:54	Soil	8
DP-11-5	12/17/2004 07:57	Soil	9
DP-11-10	12/17/2004 08:01	Soil	10
DP-11-15	12/17/2004 08:06	Soil	11
DP-11-20	12/17/2004 08:13	Soil	12
DP-11-25	12/17/2004 08:24	Soil	13
BG-2-1	12/17/2004 08:44	Soil	14
BG-2-10	12/17/2004 08:52	Soil	15
DP-12-1	12/17/2004 09:22	Soil	16
DP-12-5	12/17/2004 09:25	Soil	17
DP-12-10	12/17/2004 09:29	Soil	18
DP-12-15	12/17/2004 09:35	Soil	19
DP-12-20	12/17/2004 09:41	Soil	20
DP-12-25	12/17/2004 09:51	Soil	21
DP-13-1	12/17/2004 10:07	Soil	22
DP-13-5	12/17/2004 10:11	Soil	23
DP-13-10	12/17/2004 10:17	Soil	24
DP-13-15	12/17/2004 10:20	Soil	25
DP-13-20	12/17/2004 10:24	Soil	26
DP-13-25	12/17/2004 10:31	Soil	27
EB-121704	12/17/2004 08:31	Water	28

Metals - ICP/MS

STL Los Angeles

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d'a

Attn.: Sabina Sudoko 1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L190115

SEVERN TREM LABORATORY

STL San Francisco 1220 Quarry Lane Pleasanton, CA 94566

Tel: (925) 484-1919 Fax: (925) 484-1096 www.stl-inc.com www.chromalab.com

CA DHS ELAP# 2496

Prep(s): 3050B

Sample ID: DP-10-1

Sampled: Matrix:

Thallium

Zinc

Vanadium

Soil

12/17/2004 06:27

Analysis Flag: . (See Legend and Note Section )

ND

7.8

12

0.15

0.67

0.55

Test(s): 6020

Lab ID:

Received: 12/21/2004 10:10

2004-12-0729 - 1

10.00 01/03/2005 12:36

10.00 01/03/2005 12:36

10.00 01/03/2005 12:36

Extracted: 1/3/2005 06:38 QC Batch#: 2005/01/03-01.67

Compound Conc. MDL RL Unit Dilution Analyzed Flag **Antimony** 0.46 2.0 mg/Kg 0.14 10.00 01/03/2005 12:36 Arsenic ND 0.42 2.0 mg/Kg 10.00 01/03/2005 12:36 **Barium** 27 1.0 10.00 01/03/2005 12:36 0.14 mg/Kg Beryllium ND 10.00 01/03/2005 12:36 0.16 1.0 mg/Kg Cadmium ND 0.12 1.0 mg/Kg 10.00 01/03/2005 12:36 Chromium 1.9 2.0 10.00 01/03/2005 12:36 0.40 mg/Kg Cobalt 1.0 1.9 0.13 10.00 01/03/2005 12:36 mg/Kg Copper 4.4 **l**2.0 10.00 01/03/2005 12:36 0.15 mg/Kg Lead 0.81 0.12 1.0 10.00 01/03/2005 12:36 mg/Kg Molybdenum 0.28 0.12 2.0 10.00 01/03/2005 12:36 mg/Kg Nickel 2.4 2.0 10.00 01/03/2005 12:36 0.21 mg/Kg Selenium 2.0 10.00 01/03/2005 12:36 ND 0.55 mg/Kg Silver ND 0.15 1.0 mg/Kg 10.00 01/03/2005 12:36

1.0

10

2.0

mg/Kg

mg/Kg

mg/Kg

01/04/2005 12:33

Metals - ICP/MS

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STL Los Angeles

Attn.: Sabina Sudoko 1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L190115

SEVERN TRENT LABORATORY

**STL San Francisco** 1220 Quarry Lane Pleasanton, CA 94566

Tel: (925) 484-1919 Fax: (925) 484-1096 www.stl-inc.com www.chromalab.com

CA DHS ELAP# 2496

Prep(s): 3050B Test(s): 6020

 Sample ID:
 DP-10-5
 Lab ID:
 2004-12-0729 - 2

 Sampled:
 12/17/2004 06:29
 Extracted:
 1/3/2005 06:38

 Matrix:
 Soil
 QC Batch#:
 2005/01/03-01.67

Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	ND	0.14	2.0	mg/Kg	10.00	01/03/2005 12:45	· · · · · · · · · · · · · · · · · · ·
Arsenic	ND	0.42	2.0	mg/Kg	10.00	01/03/2005 12:45	
Barium	46	0.14	1.0	mg/Kg	10.00	01/03/2005 12:45	
Beryllium	ND	0.16	1.0	mg/Kg	10.00	01/03/2005 12:45	
Cadmium	ND	0.12	1.0	mg/Kg	10.00	01/03/2005 12:45	
Chromium	3.1	0.40	2.0	mg/Kg	10.00	01/03/2005 12:45	
Cobalt	2.6	0.13	1.0	mg/Kg	10.00	01/03/2005 12:45	
Copper	4.2	0.15	2.0	mg/Kg	10.00	01/03/2005 12:45	
Lead	1.1	0.12	1.0	mg/Kg	10.00	01/03/2005 12:45	
Molybdenum	ND	0.12	2.0	mg/Kg	10.00	01/03/2005 12:45	
Nickel	2.7	0.21	2.0	mg/Kg	10.00	01/03/2005 12:45	
Selenium	ND	0.55	2.0	mg/Kg	10.00	01/03/2005 12:45	
Silver	ND	0.15	1.0	mg/Kg	10.00	01/03/2005 12:45	
Thallium	ND	0.15	1.0	mg/Kg		01/03/2005 12:45	
Vanadium	12	0.67	10	mg/Kg	10.00	01/03/2005 12:45	
Zinc	17	0.55	2.0	mg/Kg	10.00	01/03/2005 12:45	

Received: 12/21/2004 10:10

Metals - ICP/MS

(

STL Los Angeles

Attn.: Sabina Sudoko 1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L190115

SEVERN TRENT LABORATORY

**STL San Francisco** 1220 Quarry Lane Pleasanton, CA 94566

Tel: (925) 484-1919 Fax: (925) 484-1096 www.stl-inc.com www.chromalab.com

CA DHS ELAP# 2496

Prep(s): 3050B Test(s): 6020

Sample ID: **DP-10-10** Lab ID: 2004-12-0729 - 3
Sampled: 12/17/2004 06:32 Extracted: 1/3/2005 06:38

Received: 12/21/2004 10:10

Matrix: Soil QC Batch#: 2005/01/03-01.67

Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	ND	0.14	2.0	mg/Kg	10.00	01/03/2005 12:48	
Arsenic	ND	0.42	2.0	mg/Kg	10.00	01/03/2005 12:48	
Barium	15	0.14	1.0	mg/Kg	10.00	01/03/2005 12:48	
Beryllium	ND	0.16	1.0	mg/Kg	10.00	01/03/2005 12:48	
Cadmium	ND	0.12	1.0	mg/Kg	10.00	01/03/2005 12:48	
Chromium	0.66	0.40	2.0	mg/Kg	10.00	01/03/2005 12:48	
Cobalt	1.0	0.13	1.0	mg/Kg	10.00	01/03/2005 12:48	
Copper	1.9	0.15	2.0	mg/Kg	10.00	01/03/2005 12:48	
Lead	0.44	0.12	1.0	mg/Kg	10.00	01/03/2005 12:48	
Molybdenum	ND	0.12	2.0	mg/Kg	10.00	01/03/2005 12:48	
Nickel	1.1	0.21	2.0	mg/Kg	10.00	01/03/2005 12:48	
Selenium	ND	0.55	2.0	mg/Kg	10.00	01/03/2005 12:48	
Silver	ND	0.15	1.0	mg/Kg	10.00	01/03/2005 12:48	
Thallium	ND	0.15	1.0	mg/Kg		01/03/2005 12:48	
Vanadium	3.8	0.67	10	mg/Kg		01/03/2005 12:48	
Zinc	6.2	0.55	2.0	mg/Kg		01/03/2005 12:48	

Metals - ICP/MS

STL Los Angeles

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Project: E4L190115

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CA DHS ELAP# 2496

Prep(s): 3050B Test(s): 6020

Sample ID: **DP-10-15** Lab ID: 2004-12-0729 - 4

Sampled: 12/17/2004 06:37 Extracted: 1/3/2005 06:38

Matrix: Soil QC Batch#: 2005/01/03-01.67

Received: 12/21/2004 10:10

Compound Conc. RL MDL Unit Dilution Analyzed Flag **Antimony** ND 0.14 2.0 10.00 01/03/2005 12:51 mg/Kg Arsenic ND 0.42 2.0 10.00 01/03/2005 12:51 mg/Kg Barium 25 0.14 1.0 10.00 01/03/2005 12:51 mg/Kg Beryllium ND 10.00 01/03/2005 12:51 0.16 1.0 mg/Kg Cadmium ND 0.12 1.0 mg/Kg 10.00 01/03/2005 12:51 Chromium 2.1 0.40 2.0 10.00 01/03/2005 12:51 mg/Kg Cobalt 1.8 0.13 1.0 mg/Kg 10.00 01/03/2005 12:51 Copper 10.00 01/03/2005 12:51 4.4 0.15 2.0 mg/Kg Lead 0.84 1.0 10.00 01/03/2005 12:51 0.12 mg/Kg Molvbdenum ND 0.12 2.0 10.00 01/03/2005 12:51 mg/Kg Nickel 1.8 0.21 2.0 10.00 01/03/2005 12:51 mg/Kg Selenium 0.57 2.0 0.55 mg/Kg 10.00 01/03/2005 12:51 Silver ND 0.15 1.0 mg/Kg 10.00 01/03/2005 12:51 Thallium ND 1.0 10.00 01/03/2005 12:51 0.15 mg/Kg Vanadium 9.3 0.67 10 10.00 01/03/2005 12:51 mg/Kg Zinc 10 0.55 2.0 mg/Kg 10.00 01/03/2005 12:51

Metals - ICP/MS

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CA DHS ELAP# 2496

Prep(s): 3050B Test(s): 6020

Sample ID: DP-10-20 Lab ID: 2004-12-0729 - 5 Sampled: 12/17/2004 06:43

Matrix: Soil QC Batch#: 2005/01/03-01.67

Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	ND	0.14	2.0	mg/Kg	10.00	01/03/2005 12:54	<u> </u>
Arsenic	0.20	0.42	2.0	mg/Kg		01/03/2005 12:54	
Barium	52	0.14	1.0	mg/Kg	10.00	01/03/2005 12:54	
Beryllium	0.11	0.16	1.0	mg/Kg	10.00	01/03/2005 12:54	
Cadmium	ND	0.12	1.0	mg/Kg	10.00	01/03/2005 12:54	
Chromium	3.1	0.40	2.0	mg/Kg	10.00	01/03/2005 12:54	
Cobalt	3.1	0.13	1.0	mg/Kg	10.00	01/03/2005 12:54	
Copper	5.4	0.15	2.0	mg/Kg	10.00	01/03/2005 12:54	
Lead	1.2	0.12	1.0	mg/Kg	10.00	01/03/2005 12:54	
Molybdenum	ND	0.12	2.0	mg/Kg	10.00	01/03/2005 12:54	
Nickel	3.3	0.21	2.0	mg/Kg	10.00	01/03/2005 12:54	
Selenium	ND	0.55	2.0	mg/Kg	10.00	01/03/2005 12:54	
Silver	ND	0.15	1.0	mg/Kg	10.00	01/03/2005 12:54	
Thallium	ND	0.15	1.0	mg/Kg	10.00	01/03/2005 12:54	
Vanadium	12	0.67	10	mg/Kg	10.00	01/03/2005 12:54	
Zinc	20	0.55	2.0	mg/Kg	10.00	01/03/2005 12:54	

Received: 12/21/2004 10:10

Extracted:

1/3/2005 06:38

Metals - ICP/MS

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CA DHS ELAP# 2496

Prep(s): 3050B

Sample ID: DP-10-25

Sampled: 12/17/2004 06:52

Matrix: Soil

Test(s): 6020

Received: 12/21/2004 10:10

Lab ID: 2004-12-0729 - 6

Extracted: 1/3/2005 06:38

Unit mg/Kg mg/Kg		01/03/2005 13:24	Flag
mg/Kg			
		01/03/2005 13:24	
mg/Kg [		1	
mg/Kg			
mg/Kg	10.00	01/03/2005 13:24	
mg/Kg	10.00	01/03/2005 13:24	
mg/Kg	10.00	01/03/2005 13:24	
mg/Kg	10.00	01/03/2005 13:24	
mg/Kg	10.00	01/03/2005 13:24	
mg/Kg			
mg/Kg			
mg/Kg	•		
	mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg	mg/Kg 10.00	mg/Kg

Metals - ICP/MS

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CA DHS ELAP# 2496

Prep(s): 3050B

Sample ID: BG-1-10

Sampled: 12/17/2004 07:36

Matrix: Soil

Test(s): 6020

Received: 12/21/2004 10:10

Lab ID: 2004-12-0729 - 7

Extracted: 1/3/2005 06:38

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Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	ND	0.14	2.0	mg/Kg	10.00	01/03/2005 13:27	
Arsenic	0.32	0.42	2.0	mg/Kg	10.00	01/03/2005 13:27	
Barium	31	0.14	1.0	mg/Kg	10.00	01/03/2005 13:27	
Beryllium	ND	0.16	1.0	mg/Kg	10.00	01/03/2005 13:27	
Cadmium	ND	0.12	1.0	mg/Kg	10.00	01/03/2005 13:27	
Chromium	2.5	0.40	2.0	mg/Kg	10.00	01/03/2005 13:27	
Cobalt	1.8	0.13	1.0	mg/Kg	10.00	01/03/2005 13:27	
Copper	4.2	0.15	2.0	mg/Kg	10.00	01/03/2005 13:27	
Lead	1.1	0.12	1.0	mg/Kg	10.00	01/03/2005 13:27	
Molybdenum	ND	0.12	2.0	mg/Kg	10.00	01/03/2005 13:27	
Nickel	2.8	0.21	2.0	mg/Kg	10.00	01/03/2005 13:27	
Selenium	0.69	0.55	2.0	mg/Kg	10.00	01/03/2005 13:27	
Silver	ND	0.15	1.0	mg/Kg	10.00	01/03/2005 13:27	
Thallium	ND	0.15	1.0	mg/Kg	10.00	01/03/2005 13:27	
Vanadium	8.2	0.67	10	mg/Kg	10.00	01/03/2005 13:27	
Zinc	14	0.55		mg/Kg	10.00	01/03/2005 13:27	

Metals - ICP/MS

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CA DHS ELAP# 2496

Prep(s): 3050B

Sample ID: DP-11-1

Sampled: 12/17/2004 07:54

Matrix: Soil

Test(s): 6020

Lab ID:

2004-12-0729 - 8

Extracted: 1/3

Received: 12/21/2004 10:10

1/3/2005 06:38

Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	ND	0.14	2.0	mg/Kg	10.00	01/03/2005 13:30	
Arsenic	0.56	0.42	2.0	mg/Kg	10.00	01/03/2005 13:30	
Barium	75	0.14	1.0	mg/Kg	10.00	01/03/2005 13:30	
Beryllium	0.18	0.16	1.0	mg/Kg	10.00	01/03/2005 13:30	
Cadmium	0.11	0.12	1.0	mg/Kg	10.00	01/03/2005 13:30	
Chromium	7.6	0.40	2.0	mg/Kg	10.00	01/03/2005 13:30	
Cobalt	5.5	0.13	1.0	mg/Kg	10.00	01/03/2005 13:30	
Copper	12	0.15	2.0	mg/Kg	10.00	01/03/2005 13:30	
Lead	7.6	0.12	1.0	mg/Kg	10.00	01/03/2005 13:30	
Molybdenum	0.88	0.12	2.0	mg/Kg	10.00	01/03/2005 13:30	
Nickel	6.1	0.21	2.0	mg/Kg	10.00	01/03/2005 13:30	
Selenium	ND	0.55	2.0	mg/Kg	10.00	01/03/2005 13:30	
Silver	ND	0.15	1.0	mg/Kg	10.00	01/03/2005 13:30	
Thallium	ND	0.15	1.0	mg/Kg	10.00	01/03/2005 13:30	
Vanadium	22	0.67	10	mg/Kg	10.00	01/03/2005 13:30	
Zinc	44	0.55	2.0	mg/Kg	10.00	01/03/2005 13:30	

Metals - ICP/MS

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CA DHS ELAP# 2496

Prep(s): 3050B

Sample ID: DP-11-5

Sampled: 12/17/2004 07:57

Matrix: Soil

Test(s): 6020

Received: 12/21/2004 10:10

Lab ID:

2004-12-0729 - 9

Extracted:

1/3/2005 06:38

Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	ND	0.14	2.0	mg/Kg	10.00	01/03/2005 13:34	Y
Arsenic	ND	0.42	2.0	mg/Kg		01/03/2005 13:34	
Barium	32	0.14	1.0	mg/Kg	10.00	01/03/2005 13:34	
Beryllium	ND	0.16	1.0	mg/Kg	10.00	01/03/2005 13:34	
Cadmium	ND	0.12	1.0	mg/Kg	10.00	01/03/2005 13:34	
Chromium	2.1	0.40	2.0	mg/Kg	10.00	01/03/2005 13:34	
Cobalt	2.1	0.13	1.0	mg/Kg	10.00	01/03/2005 13:34	
Copper	3.9	0.15	2.0	mg/Kg	10.00	01/03/2005 13:34	
Lead	1.0	0.12	1.0	mg/Kg	10.00	01/03/2005 13:34	
Molybdenum	ND	0.12	2.0	mg/Kg	10.00	01/03/2005 13:34	
Nickel	2.0	0.21	2.0	mg/Kg	10.00	01/03/2005 13:34	
Selenium	ND	0.55	2.0	mg/Kg	10.00	01/03/2005 13:34	
Silver	ND	0.15	1.0	mg/Kg	10.00	01/03/2005 13:34	
Thallium	ND	0.15	1.0	mg/Kg	10.00	01/03/2005 13:34	
Vanadium	8.0	0.67	10	mg/Kg	10.00	01/03/2005 13:34	
Zinc	14	0.55	2.0	mg/Kg	10.00	01/03/2005 13:34	

Metals - ICP/MS

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CA DHS ELAP# 2496

Prep(s): 3050B

Sample ID: DP-11-10

Sampled: 12/17/2004 08:01

Matrix: Soil

Test(s): 6020

Received: 12/21/2004 10:10

Lab ID: 2004-12-0729 - 10

Extracted: 1/3/2005 06:38

Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	ND	0.14	2.0	mg/Kg	10.00	01/03/2005 13:37	
Arsenic	ND	0.42	2.0	mg/Kg		01/03/2005 13:37	
Barium	52	0.14	1.0	mg/Kg	10.00	01/03/2005 13:37	
Beryllium	ND	0.16	1.0	mg/Kg	10.00	01/03/2005 13:37	
Cadmium	ND	0.12	1.0	mg/Kg	10.00	01/03/2005 13:37	
Chromium	4.5	0.40	2.0	mg/Kg	10.00	01/03/2005 13:37	
Cobalt	3.4	0.13	1.0	mg/Kg	10.00	01/03/2005 13:37	
Copper	8.0	0.15	2.0	mg/Kg	10.00	01/03/2005 13:37	
Lead	1.4	0.12	1.0	mg/Kg	10.00	01/03/2005 13:37	
Molybdenum	0.58	0.12	2.0	mg/Kg	10.00	01/03/2005 13:37	
Nickel	4.6	0.21	2.0	mg/Kg	10.00	01/03/2005 13:37	
Selenium	ND	0.55	2.0	mg/Kg	10.00	01/03/2005 13:37	
Silver	ND	0.15	1.0	mg/Kg	10.00	01/03/2005 13:37	
Thallium	ND	0.15	1.0	mg/Kg	10.00	01/03/2005 13:37	
Vanadium	15	0.67	10	mg/Kg	10.00	01/03/2005 13:37	
Zinc	25	0.55	2.0	mg/Kg	10.00	01/03/2005 13:37	

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CA DHS ELAP# 2496

Prep(s): 3050B Test(s): 6020

Sample ID: **DP-11-15** Lab ID: 2004-12-0729 - 11

Received: 12/21/2004 10:10

Sampled: 12/17/2004 08:06 Extracted: 1/3/2005 06:38

Matrix: Soil QC Batch#: 2005/01/03-01.67

Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	ND	0.14	2.0	mg/Kg	10.00	01/03/2005 13:40	
Arsenic	ND	0.42	2.0	mg/Kg	10.00	01/03/2005 13:40	
Barium	16	0.14	1.0	mg/Kg	10.00	01/03/2005 13:40	
Beryllium	ND	0.16	1.0	mg/Kg	10.00	01/03/2005 13:40	
Cadmium	ND	0.12	1.0	mg/Kg	10.00	01/03/2005 13:40	
Chromium	1.2	0.40	2.0	mg/Kg	10.00	01/03/2005 13:40	
Cobalt	1.4	0.13	1.0	mg/Kg	10.00	01/03/2005 13:40	
Copper	3.9	0.15	2.0	mg/Kg	10.00	01/03/2005 13:40	
Lead	0.76	0.12	1.0	mg/Kg	10.00	01/03/2005 13:40	
Molybdenum	ND	0.12	2.0	mg/Kg	10.00	01/03/2005 13:40	
Nickel	1.5	0.21	2.0	mg/Kg	10.00	01/03/2005 13:40	
Selenium	ND	0.55	2.0	mg/Kg	10.00	01/03/2005 13:40	
Silver	ND	0.15	1.0	mg/Kg	10.00	01/03/2005 13:40	
Thallium	ND	0.15	1.0	mg/Kg	10.00	01/03/2005 13:40	
Vanadium	5.3	0.67	10	mg/Kg	10.00	01/03/2005 13:40	
Zinc	11	0.55	2.0	mg/Kg	10.00	01/03/2005 13:40	

Metals - ICP/MS

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CA DHS ELAP# 2496

Prep(s): 3050B

Sample ID: DP-11-20

Sampled: 12/17/2004 08:13

Matrix: Soil

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Test(s): 6020

Received: 12/21/2004 10:10

Lab ID: 2004-12-0729 - 12

Extracted: 1/3/2005 06:38

Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	ND	0.14	2.0	mg/Kg	10.00	01/03/2005 13:43	
Arsenic	0.32	0.42	2.0	mg/Kg	10.00	01/03/2005 13:43	
Barium	29	0.14	1.0	mg/Kg	10.00	01/03/2005 13:43	
Beryllium	ND	0.16	1.0	mg/Kg	10.00	01/03/2005 13:43	
Cadmium	ND	0.12	1.0	mg/Kg	10.00	01/03/2005 13:43	
Chromium	6.2	0.40	2.0	mg/Kg	10.00	01/03/2005 13:43	
Cobalt	1.4	0.13	1.0	mg/Kg	10.00	01/03/2005 13:43	
Copper	5.9	0.15	2.0	mg/Kg	10.00	01/03/2005 13:43	
Lead	0.94	0.12	1.0	mg/Kg	10.00	01/03/2005 13:43	
Molybdenum	1.3	0.12	2.0	mg/Kg	10.00	01/03/2005 13:43	
Nickel	11	0.21	2.0	mg/Kg	10.00	01/03/2005 13:43	
Selenium	1.9	0.55	2.0	mg/Kg	10.00	01/03/2005 13:43	
Silver	ND	0.15	1.0	mg/Kg	10.00	01/03/2005 13:43	
Thallium	ND	0.15	1.0	mg/Kg	10.00	01/03/2005 13:43	
Vanadium	6.8	0.67	10	mg/Kg	10.00	01/03/2005 13:43	
Zinc	22	0.55	2.0	mg/Kg	10.00	01/03/2005 13:43	

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CA DHS ELAP# 2496

Prep(s): 3050B

Sample ID: **DP-11-25** 

Sampled: 12/17/2004 08:24

Matrix:

Soil

Test(s): 6020

Received: 12/21/2004 10:10

Lab ID:

2004-12-0729 - 13

Extracted:

1/3/2005 06:38

Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	ND	0.14	2.0	mg/Kg	10.00	01/03/2005 13:46	
Arsenic	ND	0.42	2.0	mg/Kg	10.00	01/03/2005 13:46	
Barium	87	0.14	1.0	mg/Kg	10.00	01/03/2005 13:46	
Beryllium	ND	0.16	1.0	mg/Kg	10.00	01/03/2005 13:46	
Cadmium	ND	0.12	1.0	mg/Kg	10.00	01/03/2005 13:46	
Chromium	7.0	0.40	2.0	mg/Kg	10.00	01/03/2005 13:46	
Cobalt	4.0	0.13	1.0	mg/Kg	10.00	01/03/2005 13:46	
Copper	5.0	0.15	2.0	mg/Kg	10.00	01/03/2005 13:46	
Lead	0.83	0.12	1.0	mg/Kg	10.00	01/03/2005 13:46	
Molybdenum	ND	0.12	2.0	mg/Kg	10.00	01/03/2005 13:46	
Nickel	5.0	0.21	2.0	mg/Kg	10.00	01/03/2005 13:46	
Selenium	ND	0.55	2.0	mg/Kg	10.00	01/03/2005 13:46	
Silver	ND	0.15	1.0	mg/Kg	10.00	01/03/2005 13:46	
Thallium	ND	0.15	1.0	mg/Kg	10.00	01/03/2005 13:46	
Vanadium	17	0.67	10	mg/Kg	10.00	01/03/2005 13:46	
Zinc	26	0.55	2.0	mg/Kg	10.00	01/03/2005 13:46	

Metals - ICP/MS

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CA DHS ELAP# 2496

Prep(s): 3050B

Sample ID: BG-2-1

Matrix:

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Sampled: 12/17/2004 08:44

Soil

Test(s): 6020

Lab ID:

2004-12-0729 - 14

Extracted:

Received: 12/21/2004 10:10

1/3/2005 06:38

Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	ND	0.14	2.0	mg/Kg	10.00	01/03/2005 13:49	
Arsenic	ND	0.42	2.0	mg/Kg	10.00	01/03/2005 13:49	
Barium	35	0.14	1.0	mg/Kg	10.00	01/03/2005 13:49	
Beryllium	0.10	0.16	1.0	mg/Kg	10.00	01/03/2005 13:49	
Cadmium	ND	0.12	1.0	mg/Kg	10.00	01/03/2005 13:49	
Chromium	1.9	0.40	2.0	mg/Kg	10.00	01/03/2005 13:49	
Cobalt	2.9	0.13	1.0	mg/Kg	10.00	01/03/2005 13:49	
Copper	3.8	0.15	2.0	mg/Kg	10.00	01/03/2005 13:49	
Lead	1.1	0.12	1.0	mg/Kg	10.00	01/03/2005 13:49	
Molybdenum	0.30	0.12	2.0	mg/Kg	10.00	01/03/2005 13:49	
Nickel	2.0	0.21	2.0	mg/Kg	10.00	01/03/2005 13:49	
Selenium	1.7	0.55	2.0	mg/Kg	10.00	01/03/2005 13:49	
Silver	ND	0.15	1.0	mg/Kg	10.00	01/03/2005 13:49	
Thallium	ND	0.15	1.0	mg/Kg	10.00	01/03/2005 13:49	
Vanadium	7.5	0.67	10	mg/Kg	10.00	01/03/2005 13:49	
Zinc	13	0.55	2.0	mg/Kg	10.00	01/03/2005 13:49	

Metals - ICP/MS

STL Los Angeles

Attn.: Sabina Sudoko 1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L190115

SEVERN TRENT LABORATORY

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CA DHS ELAP# 2496

Prep(s): 3050B

Sample ID: BG-2-10

Sampled: 12/17/2004 08:52

Matrix: Soil

Test(s): 6020

Received: 12/21/2004 10:10

Lab ID: 2004-12-0729 - 15

Extracted: 1/3/2005 06:38

Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	ND	0.14	2.0	mg/Kg	10.00	01/03/2005 13:52	
Arsenic	ND	0.42	2.0	mg/Kg	10.00	01/03/2005 13:52	
Barium	49	0.14	1.0	mg/Kg	10.00	01/03/2005 13:52	
Beryllium	0.10	0.16	1.0	mg/Kg	10.00	01/03/2005 13:52	
Cadmium	ND	0.12	1.0	mg/Kg	10.00	01/03/2005 13:52	
Chromium	3.9	0.40	2.0	mg/Kg	10.00	01/03/2005 13:52	
Cobalt	3.2	0.13	1.0	mg/Kg	10.00	01/03/2005 13:52	
Copper	5.7	0.15	2.0	mg/Kg	10.00	01/03/2005 13:52	
Lead	1.3	0.12	1.0	mg/Kg	10.00	01/03/2005 13:52	
Molybdenum	ND	0.12	2.0	mg/Kg	10.00	01/03/2005 13:52	
Nickel	3.4	0.21	2.0	mg/Kg	10.00	01/03/2005 13:52	
Selenium	ND	0.55	2.0	mg/Kg	10.00	01/03/2005 13:52	
Silver	ND	0.15	1.0	mg/Kg	10.00	01/03/2005 13:52	
Thallium	ND	0.15	1.0	mg/Kg	10.00	01/03/2005 13:52	
Vanadium	12	0.67	10	mg/Kg	10.00	01/03/2005 13:52	
Zinc	20	0.55	2.0	mg/Kg	10.00	01/03/2005 13:52	

Metals - ICP/MS

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CA DHS ELAP# 2496

Prep(s): 3050B

Sample ID: DP-12-1

Sampled: 12/17/2004 09:22

Matrix: Soil

Test(s): 6020

Received: 12/21/2004 10:10

Lab ID: 2004-12-0729 - 16

Extracted: 1/3/2005 06:38

Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	ND	0.14	2.0	mg/Kg	10.00	01/03/2005 14:22	
Arsenic	ND	0.42	2.0	mg/Kg	10.00	01/03/2005 14:22	
Barium	46	0.14	1.0	mg/Kg	10.00	01/03/2005 14:22	
Beryllium	0.11	0.16	1.0	mg/Kg	10.00	01/03/2005 14:22	
Cadmium	ND	0.12	1.0	mg/Kg	10.00	01/03/2005 14:22	
Chromium	4.5	0.40	2.0	mg/Kg	10.00	01/03/2005 14:22	
Cobalt	3.3	0.13	1.0	mg/Kg	10.00	01/03/2005 14:22	
Copper	7.0	0.15	2.0	mg/Kg	10.00	01/03/2005 14:22	
Lead	8.2	0.12	1.0	mg/Kg	10.00	01/03/2005 14:22	
Molybdenum	0.57	0.12	2.0	mg/Kg	10.00	01/03/2005 14:22	
Nickel	3.7	0.21	2.0	mg/Kg	10.00	01/03/2005 14:22	
Selenium	2.2	0.55	2.0	mg/Kg	10.00	01/03/2005 14:22	
Silver	ND	0.15	1.0	mg/Kg	10.00	01/03/2005 14:22	
Thallium	ND	0.15	1.0	mg/Kg	10.00	01/03/2005 14:22	
Vanadium	16	0.67	10	mg/Kg	10.00	01/03/2005 14:22	
Zinc	28	0.55		mg/Kg	10.00	01/03/2005 14:22	

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12/17/2004 09:25

Project: E4L190115

Sampled:

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CA DHS ELAP# 2496

Prep(s): 3050B Test(s): 6020

Sample ID: DP-12-5 Lab ID: 2004-12-0729 - 17

Received: 12/21/2004 10:10

Extracted: 1/3/2005 06:38 Matrix: Soil QC Batch#: 2005/01/03-01.67

Compound Conc. RL **MDL** Unit Dilution Analyzed Flag Antimony ND 0.14 2.0 mg/Kg 10.00 01/03/2005 14:25 Arsenic ND 0.42 2.0 10.00 01/03/2005 14:25 mg/Kg Barium 34 0.14 1.0 mg/Kg 10.00 01/03/2005 14:25 Beryllium ND 0.16 1.0 10.00 01/03/2005 14:25 mg/Kg Cadmium ND 0.12 1.0 10.00 01/03/2005 14:25 mg/Kg Chromium 2.8 0.40 2.0 mg/Kg 10.00 01/03/2005 14:25 Cobalt 2.7 1.0 0.13 10.00 01/03/2005 14:25 mg/Kg Copper 4.3 2.0 10.00 01/03/2005 14:25 0.15 mg/Kg Lead 1.0 0.12 1.0 mg/Kg 10.00 01/03/2005 14:25 Molvbdenum ND 0.12 2.0 mg/Kg 10.00 01/03/2005 14:25 Nickel 2.3 0.21 2.0 mg/Kg 10.00 01/03/2005 14:25 Selenium 0.43 0.55 2.0 10.00 01/03/2005 14:25 mg/Kg Silver ND 0.15 1.0 10.00 01/03/2005 14:25 mg/Kg Thallium ND 0.15 1.0 10.00 01/03/2005 14:25 mg/Kg Vanadium 12 0.67 10 mg/Kg 10.00 01/03/2005 14:25 Zinc 14 0.55 2.0 10.00 01/03/2005 14:25 mg/Kg

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CA DHS ELAP# 2496

Prep(s): 3050B

Sample ID: DP-12-10

Sampled: 12/17/2004 09:29

Matrix: Soil

Test(s): 6020

Received: 12/21/2004 10:10

Lab ID: 2004-12-0729 - 18

Extracted: 1/3/2005 06:38

Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	ND	0.14	2.0	mg/Kg	10.00	01/03/2005 14:28	
Arsenic	ND	0.42	2.0	mg/Kg	10.00	01/03/2005 14:28	
Barium	30	0.14	1.0	mg/Kg	10.00	01/03/2005 14:28	
Beryllium	ND	0.16	1.0	mg/Kg	10.00	01/03/2005 14:28	
Cadmium	ND	0.12	1.0	mg/Kg	10.00	01/03/2005 14:28	
Chromium	3.0	0.40	2.0	mg/Kg	10.00	01/03/2005 14:28	
Cobalt	2.2	0.13	1.0	mg/Kg	10.00	01/03/2005 14:28	
Copper	4.9	0.15	2.0	mg/Kg	10.00	01/03/2005 14:28	
Lead	1.1	0.12	1.0	mg/Kg	10.00	01/03/2005 14:28	
Molybdenum	ND	0.12	2.0	mg/Kg	10.00	01/03/2005 14:28	
Nickel	2.1	0.21	2.0	mg/Kg	10.00	01/03/2005 14:28	
Selenium	0.63	0.55	2.0	mg/Kg	10.00	01/03/2005 14:28	
Silver	ND	0.15	1.0	mg/Kg	10.00	01/03/2005 14:28	
Thallium	ND	0.15	1.0	mg/Kg	10.00	01/03/2005 14:28	
Vanadium	12	0.67	10	mg/Kg	10.00	01/03/2005 14:28	
Zinc	14	0.55	2.0	mg/Kg	10.00	01/03/2005 14:28	

Metals - ICP/MS

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CA DHS ELAP# 2496

Prep(s): 3050B Test(s): 6020

Sample ID: **DP-12-15** Lab ID: 2004-12-0729 - 19

Sampled: 12/17/2004 09:35 Extracted: 1/3/2005 06:38

Received: 12/21/2004 10:10

Matrix: Soil QC Batch#: 2005/01/03-01.67

Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	ND	0.14	2.0	mg/Kg	10.00	01/03/2005 14:31	
Arsenic	ND	0.42	2.0	mg/Kg	10.00	01/03/2005 14:31	
Barium	34	0.14	1.0	mg/Kg	10.00	01/03/2005 14:31	
Beryllium	ND	0.16	1.0	mg/Kg	10.00	01/03/2005 14:31	
Cadmium	ND	0.12	1.0	mg/Kg	10.00	01/03/2005 14:31	
Chromium	2.2	0.40	2.0	mg/Kg	10.00	01/03/2005 14:31	
Cobalt	2.0	0.13	1.0	mg/Kg	10.00	01/03/2005 14:31	
Copper	4.7	0.15	2.0	mg/Kg	10.00	01/03/2005 14:31	
Lead	1.1	0.12	1.0	mg/Kg	10.00	01/03/2005 14:31	
Molybdenum	0.25	0.12	2.0	mg/Kg	10.00	01/03/2005 14:31	
Nickel	3.2	0.21	2.0	mg/Kg	10.00	01/03/2005 14:31	
Selenium	0.47	0.55	2.0	mg/Kg	10.00	01/03/2005 14:31	
Silver	ND	0.15	1.0	mg/Kg	10.00	01/03/2005 14:31	
Thallium	ND	0.15	1.0	mg/Kg	10.00	01/03/2005 14:31	
Vanadium	7.6	0.67	10	mg/Kg	10.00	01/03/2005 14:31	
Zinc	11	0.55	2.0	mg/Kg	10.00	01/03/2005 14:31	

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CA DHS ELAP# 2496

Prep(s): 3050B Test(s):

Sample ID: **DP-12-20** Lab ID: 2004-12-0729 - 20

Received: 12/21/2004 10:10

6020

Sampled: 12/17/2004 09:41 Extracted: 1/3/2005 06:38

Matrix: Soil QC Batch#: 2005/01/03-01.67

Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	ND	0.14	2.0	mg/Kg	10.00	01/03/2005 14:34	T.
Arsenic	0.24	0.42	2.0	mg/Kg	10.00	01/03/2005 14:34	
Barium	37	0.14	1.0	mg/Kg	10.00	01/03/2005 14:34	
Beryllium	ND	0.16	1.0	mg/Kg	10.00	01/03/2005 14:34	
Cadmium	ND	0.12	1.0	mg/Kg	10.00	01/03/2005 14:34	
Chromium	3.2	0.40	2.0	mg/Kg	10.00	01/03/2005 14:34	
Cobalt	2.6	0.13	1.0	mg/Kg	10.00	01/03/2005 14:34	
Copper	5.5	0.15	2.0	mg/Kg	10.00	01/03/2005 14:34	
Lead	0.98	0.12	1.0	mg/Kg	10.00	01/03/2005 14:34	
Molybdenum	ND	0.12	2.0	mg/Kg	10.00	01/03/2005 14:34	
Nickel	3.9	0.21	2.0	mg/Kg	10.00	01/03/2005 14:34	
Selenium	2.0	0.55	2.0	mg/Kg	10.00	01/03/2005 14:34	
Silver	ND	0.15	1.0	mg/Kg	10.00	01/03/2005 14:34	
Thallium	ND	0.15	1.0	mg/Kg	10.00	01/03/2005 14:34	
Vanadium	10	0.67	10	mg/Kg	10.00	01/03/2005 14:34	
Zinc	16	0.55	2.0	mg/Kg	10.00	01/03/2005 14:34	

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CA DHS ELAP# 2496

Prep(s): 3050B Test(s): 6020

 Sample ID:
 DP-12-25
 Lab ID:
 2004-12-0729 - 21

 Sampled:
 12/17/2004 09:51
 Extracted:
 12/28/2004 09:52

 Matrix:
 Soil
 QC Batch#:
 2004/12/28-03.67

Received: 12/21/2004 10:10

Compound Conc. MDL RL Unit Dilution Analyzed Flag **Antimony** ND 10.00 12/30/2004 01:46 0.14 2.0 mg/Kg Arsenic ND 0.42 2.0 10.00 12/30/2004 01:46 mg/Kg Barium 30 0.14 1.0 10.00 12/30/2004 01:46 mg/Kg Beryllium ND 0.16 1.0 mg/Kg 10.00 12/30/2004 01:46 Cadmium ND 0.12 1.0 mg/Kg 10.00 12/30/2004 01:46 Chromium 3.5 0.40 2.0 mg/Kg 10.00 12/30/2004 01:46 Cobalt 1.8 0.13 1.0 10.00 12/30/2004 01:46 mg/Kg Copper 10.00 12/30/2004 01:46 3.6 0.15 2.0 mg/Kg Lead 1.4 0.12 1.0 mg/Kg 10.00 12/30/2004 01:46 Molybdenum 0.22 0.12 2.0 mg/Kg 10.00 12/30/2004 01:46 Nickel 2.4 0.21 2.0 10.00 12/30/2004 01:46 mg/Kg Selenium ND 0.55 2.0 10.00 12/30/2004 01:46 mg/Kg Silver ND 10.00 12/30/2004 01:46 0.15 1.0 mg/Kg Thallium ND mg/Kg 10.00 12/30/2004 01:46 0.15 1.0 Vanadium 6.6 0.67 10 10.00 12/30/2004 01:46 mg/Kg Zinc 11 2.0 0.55 mg/Kg 10.00 12/30/2004 01:46

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CA DHS ELAP# 2496

Prep(s): 3050B Test(s): 6020

 Sample ID:
 DP-13-1
 Lab ID:
 2004-12-0729 - 22

 Sampled:
 12/17/2004 10:07
 Extracted:
 12/28/2004 09:52

 Matrix:
 Soil
 QC Batch#:
 2004/12/28-03.67

Received: 12/21/2004 10:10

Compound Conc. MDL RL Unit Dilution Analyzed Flag 10.00 12/30/2004 02:13 **Antimony** ND 0.14 2.0 mg/Kg Arsenic ND 0.42 2.0 10.00 12/30/2004 02:13 mg/Kg Barium 51 0.14 1.0 10.00 12/30/2004 02:13 mg/Kg Beryllium ND 0.16 1.0 mg/Kg 10.00 12/30/2004 02:13 Cadmium ND 0.12 1.0 mg/Kg 10.00 12/30/2004 02:13 Chromium 4.2 0.40 2.0 10.00 12/30/2004 02:13 mg/Kg Cobalt 1.6 0.13 1.0 10.00 12/30/2004 02:13 mg/Kg Copper 4.0 0.15 2.0 mg/Kg 10.00 12/30/2004 02:13 Lead 1.0 10.00 12/30/2004 02:13 0.12 1.0 mg/Kg Molybdenum ND 2.0 0.12 mg/Kg 10.00 12/30/2004 02:13 Nickel 5.8 0.21 2.0 10.00 12/30/2004 02:13 mg/Kg Selenium ND 0.55 2.0 10.00 12/30/2004 02:13 mg/Kg Silver 0.34 0.15 1.0 mg/Kg 10.00 12/30/2004 02:13 Thallium ND 0.15 10.00 12/30/2004 02:13 1.0 mg/Kg Vanadium 5.0 10.00 12/30/2004 02:13 0.67 10 mg/Kg 22 Zinc 0.55 2.0 mg/Kg 10.00 12/30/2004 02:13

Metals - ICP/MS

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Soil

Project: E4L190115

Matrix:

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CA DHS ELAP# 2496

Prep(s): 3050B Test(s): 6020

Sample ID: **DP-13-5** Lab ID: 2004-12-0729 - 23
Sampled: 12/17/2004 10:11 Extracted: 12/28/2004 09:52

Received: 12/21/2004 10:10

QC Batch#: 2004/12/28-03.67

Compound Conc. MDL RL Unit Dilution Analyzed Flag **Antimony** ND 0.14 2.0 10.00 12/30/2004 02:16 mg/Kg Arsenic ND 0.42 2.0 mg/Kg 10.00 12/30/2004 02:16 Barium 26 0.14 1.0 10.00 12/30/2004 02:16 mg/Kg Beryllium ND 10.00 12/30/2004 02:16 0.16 1.0 mg/Kg Cadmium ND 0.12 1.0 mg/Kg 10.00 12/30/2004 02:16 Chromium 5.3 2.0 0.40 10.00 12/30/2004 02:16 mg/Kg Cobalt 10.00 12/30/2004 02:16 2.7 0.13 1.0 mg/Kg Copper 4.8 0.15 2.0 mg/Kg 10.00 12/30/2004 02:16 Lead 1.2 0.12 1.0 10.00 12/30/2004 02:16 mg/Kg Molvbdenum ND 0.12 2.0 mg/Kg 10.00 12/30/2004 02:16 Nickel 3.1 2.0 0.21 mg/Kg 10.00 12/30/2004 02:16 Selenium 0.43 0.55 2.0 10.00 12/30/2004 02:16 mg/Kg Silver ND 0.15 1.0 mg/Kg 10.00 12/30/2004 02:16 Thallium ND 10.00 12/30/2004 02:16 0.15 1.0 mg/Kg Vanadium 9.8 10.00 12/30/2004 02:16 0.67 10 mg/Kg Zinc 14 0.55 2.0 10.00 12/30/2004 02:16 mg/Kg

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CA DHS ELAP# 2496

Prep(s): 3050B Test(s): 6020

Sample ID: **DP-13-10** Lab ID: 2004-12-0729 - 24

Received: 12/21/2004 10:10

Sampled: 12/17/2004 10:17 Extracted: 12/28/2004 09:52

Matrix: Soil QC Batch#: 2004/12/28-03.67

Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	ND	0.14	2.0	mg/Kg	10.00	12/30/2004 02:20	
Arsenic	0.23	0.42	2.0	mg/Kg	10.00	12/30/2004 02:20	
Barium	39	0.14	1.0	mg/Kg	10.00	12/30/2004 02:20	
Beryllium	ND	0.16	1.0	mg/Kg	10.00	12/30/2004 02:20	
Cadmium	ND	0.12	1.0	mg/Kg	10.00	12/30/2004 02:20	
Chromium	4.3	0.40	2.0	mg/Kg	10.00	12/30/2004 02:20	
Cobalt	2.4	0.13	1.0	mg/Kg	10.00	12/30/2004 02:20	
Copper	5.1	0.15	2.0	mg/Kg	10.00	12/30/2004 02:20	
Lead	1.4	0.12	1.0	mg/Kg	10.00	12/30/2004 02:20	
Molybdenum	ND	0.12	2.0	mg/Kg	10.00	12/30/2004 02:20	
Nickel	2.9	0.21	2.0	mg/Kg	10.00	12/30/2004 02:20	
Selenium	0.47	0.55	2.0	mg/Kg	10.00	12/30/2004 02:20	
Silver	ND	0.15	1.0	mg/Kg	10.00	12/30/2004 02:20	
Thallium	ND	0.15	1.0	mg/Kg	10.00	12/30/2004 02:20	
Vanadium	9.1	0.67	10	mg/Kg	10.00	12/30/2004 02:20	
Zinc	17	0.55	2.0	mg/Kg	10.00	12/30/2004 02:20	

Metals - ICP/MS

STL Los Angeles

-

Attn.: Sabina Sudoko 1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L190115

SEVERN TRENT LABORATORY

STL San Francisco 1220 Quarry Lane Pleasanton, CA 94566

Tel: (925) 484-1919 Fax: (925) 484-1096 www.stl-inc.com www.chromalab.com

CA DHS ELAP# 2496

Prep(s): 3050B Test(s): 6020

Sample ID: **DP-13-15** Lab ID: 2004-12-0729 - 25

Received: 12/21/2004 10:10

Sampled: 12/17/2004 10:20 Extracted: 12/28/2004 09:52

Matrix: Soil QC Batch#: 2004/12/28-03.67

Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	ND	0.14	2.0	mg/Kg	10.00	12/30/2004 02:24	
Arsenic	0.20	0.42	2.0	mg/Kg	10.00	12/30/2004 02:24	
Barium	68	0.14	1.0	mg/Kg	10.00	12/30/2004 02:24	
Beryllium	0.18	0.16	1.0	mg/Kg	10.00	12/30/2004 02:24	
Cadmium	ND	0.12	1.0	mg/Kg	10.00	12/30/2004 02:24	
Chromium	7.5	0.40	2.0	mg/Kg	10.00	12/30/2004 02:24	
Cobalt	4.8	0.13	1.0	mg/Kg	10.00	12/30/2004 02:24	
Copper	10	0.15	2.0	mg/Kg	10.00	12/30/2004 02:24	
Lead	2.2	0.12	1.0	mg/Kg	10.00	12/30/2004 02:24	
Molybdenum	ND	0.12	2.0	mg/Kg	10.00	12/30/2004 02:24	
Nickel	5.5	0.21	2.0	mg/Kg	10.00	12/30/2004 02:24	
Selenium	ND	0.55	2.0	mg/Kg	10.00	12/30/2004 02:24	
Silver	ND	0.15	1.0	mg/Kg	10.00	12/30/2004 02:24	
Thallium	ND	0.15	1.0	mg/Kg	10.00	12/30/2004 02:24	
Vanadium	15	0.67	10	mg/Kg	10.00	12/30/2004 02:24	
Zinc	27	0.55	2.0	mg/Kg	10.00	12/30/2004 02:24	

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CA DHS ELAP# 2496

Prep(s): 3050B Test(s): 6020

 Sample ID:
 DP-13-20
 Lab ID:
 2004-12-0729 - 26

 Sampled:
 12/17/2004 10:24
 Extracted:
 12/28/2004 09:52

 Matrix:
 Soil
 QC Batch#:
 2004/12/28-03.67

Received: 12/21/2004 10:10

Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	ND	0.14	2.0	mg/Kg	10.00	12/30/2004 02:27	· · · · · · · · · · · · · · · · · · ·
Arsenic	ND	0.42	2.0	mg/Kg	10.00	12/30/2004 02:27	
Barium	33	0.14	1.0	mg/Kg	10.00	12/30/2004 02:27	
Beryllium	ND	0.16	1.0	mg/Kg	10.00	12/30/2004 02:27	
Cadmium	ND	0.12	1.0	mg/Kg	10.00	12/30/2004 02:27	
Chromium	2.9	0.40	2.0	mg/Kg	10.00	12/30/2004 02:27	
Cobalt	2.0	0.13	1.0	mg/Kg	10.00	12/30/2004 02:27	
Copper	4.0	0.15	2.0	mg/Kg	10.00	12/30/2004 02:27	
Lead	1.0	0.12	1.0	mg/Kg	10.00	12/30/2004 02:27	
Molybdenum	ND	0.12	2.0	mg/Kg	10.00	12/30/2004 02:27	
Nickel	1.8	0.21	2.0	mg/Kg	10.00	12/30/2004 02:27	
Selenium	ND	0.55	2.0	mg/Kg	10.00	12/30/2004 02:27	
Silver	ND	0.15	1.0	mg/Kg	10.00	12/30/2004 02:27	
Thallium	ND	0.15	1.0	mg/Kg	10.00	12/30/2004 02:27	
Vanadium	6.6	0.67	10	mg/Kg	10.00	12/30/2004 02:27	
Zinc	14	0.55	2.0	mg/Kg	10.00	12/30/2004 02:27	

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CA DHS ELAP# 2496

Prep(s): 3050B Test(s): 6020

 Sample ID:
 DP-13-25
 Lab ID:
 2004-12-0729 - 27

 Sampled:
 12/17/2004 10:31
 Extracted:
 12/28/2004 09:52

 Matrix:
 Soil
 QC Batch#:
 2004/12/28-03.67

Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	ND	0.14	2.0	mg/Kg	10.00	12/30/2004 02:31	<u>~</u>
Arsenic	18	0.42	2.0	mg/Kg	10.00	12/30/2004 02:31	
Barium	37	0.14	1.0	mg/Kg	10.00	12/30/2004 02:31	
Beryllium	0.10	0.16	1.0	mg/Kg	10.00	12/30/2004 02:31	
Cadmium	ND	0.12	1.0	mg/Kg	10.00	12/30/2004 02:31	
Chromium	6.8	0.40	2.0	mg/Kg	10.00	12/30/2004 02:31	
Cobalt	2.6	0.13	1.0	mg/Kg	10.00	12/30/2004 02:31	
Copper	4.9	0.15	2.0	mg/Kg	10.00	12/30/2004 02:31	
Lead	1.3	0.12	1.0	mg/Kg	10.00	12/30/2004 02:31	
Molybdenum	0.31	0.12	2.0	mg/Kg	10.00	12/30/2004 02:31	
Nickel	3.2	0.21	2.0	mg/Kg	10.00	12/30/2004 02:31	
Selenium	0.45	0.55	2.0	mg/Kg	10.00	12/30/2004 02:31	
Silver	ND	0.15	1.0	mg/Kg	10.00	12/30/2004 02:31	
Thallium	ND	0.15	1.0	mg/Kg	10.00	12/30/2004 02:31	
Vanadium	8.2	0.67	10	mg/Kg	10.00	12/30/2004 02:31	
Zinc	15	0.55	2.0	mg/Kg	10.00	12/30/2004 02:31	

Received: 12/21/2004 10:10

Metals - ICP/MS

STL Los Angeles

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Project: E4L190115

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CA DHS ELAP# 2496

Prep(s): 3010A

Sample ID: EB-121704

12/17/2004 08:31

Sampled: Matrix:

Water

Test(s): 6020

Lab ID:

Received: 12/21/2004 10:10

2004-12-0729 - 28

Extracted:

12/22/2004 05:36

QC Batch#: 2004/12/22-01.67

Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	ND	0.00011	0.0020	mg/L	1.00	12/30/2004 17:12	
Arsenic	ND	0.00083	0.0020	mg/L	1.00	12/30/2004 17:12	
Barium	0.0066	0.00013	0.0010	mg/L	1.00	12/30/2004 17:12	
Beryllium	ND	0.00015	0.0010	mg/L	1.00	12/30/2004 17:12	
Cadmium	0.0034	0.00011	0.0010	mg/L	1.00	12/30/2004 17:12	
Chromium	0.021	0.00058	0.0020	mg/L	1.00	12/30/2004 17:12	
Cobalt	ND	0.00012	0.0020	mg/L	1.00	12/30/2004 17:12	
Copper	0.0073	0.00014	0.0020	mg/L	1.00	12/30/2004 17:12	
Lead	0.0016	0.000098	0.0010	mg/L	1.00	12/30/2004 17:12	
Molybdenum	0.0080	0.00011	0.0020	mg/L	1.00	12/30/2004 17:12	
Nickel	0.012	0.00019	0.0020	mg/L	1.00	12/30/2004 17:12	
Selenium	ND	0.00054	0.0020	mg/L	1.00	12/30/2004 17:12	
Silver	ND	0.00012	0.0010	mg/L	1.00	12/30/2004 17:12	
Thallium	ND	0.00013	0.0020	mg/L	1.00	12/30/2004 17:12	
Vanadium	ND	0.0011	0.0020	mg/L	1.00	12/30/2004 17:12	
Zinc	0.044	0.00041	0.0020	mg/L	1.00	12/30/2004 17:12	

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CA DHS ELAP# 2496

<b>Batch QC Report</b>	C Report
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Received: 12/21/2004 10:10

Prep(s): 3010A Method Blank

MB: 2004/12/22-01.67-001

Water

Test(s): 6020 QC Batch # 2004/12/22-01.67

Date Extracted: 12/22/2004 05:36

Compound	Conc.	MDL	RL	Unit	Analyzed	Flag
Antimony	ND	0.000109	0.002	mg/L	12/30/2004 16:23	
Arsenic	ND	0.000832	0.002	mg/L	12/30/2004 16:23	
Barium	ND	0.000126	0.001	mg/L	12/30/2004 16:23	
Beryllium	ND	0.000145	0.001	mg/L	12/30/2004 16:23	
Cadmium	ND	0.000114	0.001	mg/L	12/30/2004 16:23	
Chromium	ND	0.000575	0.002	mg/L	12/30/2004 16:23	
Cobalt	ND	0.000117	0.002	mg/L	12/30/2004 16:23	
Copper	ND	0.000143	0.002	mg/L	12/30/2004 16:23	
Lead	ND	0.0000983	0.001	mg/L	12/30/2004 16:23	
Molybdenum	ND	0.000109	0.002	mg/L	12/30/2004 16:23	
Nickel	ND	0.000187	0.002	mg/L	12/30/2004 16:23	
Selenium	ND	0.000537	0.002	mg/L	12/30/2004 16:23	
Silver	ND	0.000119	0.001	mg/L	12/30/2004 16:23	
Thallium	ND	0.000130	0.002	mg/L	12/30/2004 16:23	
Vanadium	ND	0.00111	0.002	mg/L	12/30/2004 16:23	
Zinc	ND	0.000409	0.002	mg/L	01/04/2005 10:38	

Metals - ICP/MS

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Project: E4L190115

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CA DHS ELAP# 2496

## **Batch QC Report**

Received: 12/21/2004 10:10

Prep(s): 3050B Method Blank

MB: 2004/12/28-03.67-001

Soil

Test(s): 6020 QC Batch # 2004/12/28-03.67

Date Extracted: 12/28/2004 09:52

Compound	Conc.	MDL	RL	Unit	Analyzed	Flag
Antimony	ND	0.0139	0.2	mg/Kg	12/30/2004 01:35	
Arsenic	ND	0.0418	0.2	mg/Kg	12/30/2004 01:35	
Barium	ND	0.0141	0.1	mg/Kg	12/30/2004 01:35	
Beryllium	ND	0.0157	0.1	mg/Kg	12/30/2004 01:35	
Cadmium	ND	0.0117	0.1	mg/Kg	12/30/2004 01:35	
Chromium	ND	0.0395	0.2	mg/Kg	12/30/2004 01:35	
Cobalt	ND	0.0131	0.1	mg/Kg	12/30/2004 01:35	
Copper	ND	0.0151	0.2	mg/Kg	12/30/2004 01:35	
Lead	ND	0.0116	0.1	mg/Kg	12/30/2004 01:35	
Molybdenum	ND	0.0118	0.2	mg/Kg	12/30/2004 01:35	
Nickel	ND	0.0210	0.2	mg/Kg	12/30/2004 01:35	
Selenium	ND	0.0554	0.2	mg/Kg	12/30/2004 01:35	
Silver	ND	0.0145	0.1	mg/Kg	12/30/2004 01:35	
Thallium	ND	0.0151	0.1	mg/Kg	12/30/2004 01:35	
Vanadium	ND	0.0666	1.0	mg/Kg	12/30/2004 01:35	
Zinc	ND	0.0554	0.2	mg/Kg	12/30/2004 01:35	

Metals - ICP/MS

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CA DHS ELAP# 2496

## **Batch QC Report**

Received: 12/21/2004 10:10

Prep(s): 3050B Method Blank

MB: 2005/01/03-01.67-001

Soil

Test(s): 6020 QC Batch # 2005/01/03-01.67

Date Extracted: 01/03/2005 06:38

Compound	Conc.	MDL	RL	Unit	Analyzed	Flag
Antimony	ND	0.0139	0.2	mg/Kg	01/03/2005 12:27	
Arsenic	ND	0.0418	0.2	mg/Kg	01/03/2005 12:27	
Barium	ND	0.0141	0.1	mg/Kg	01/03/2005 12:27	
Beryllium	ND	0.0157	0.1	mg/Kg	01/03/2005 12:27	
Cadmium	ND	0.0117	0.1	mg/Kg	01/03/2005 12:27	
Chromium	ND	0.0395	0.2	mg/Kg	01/03/2005 12:27	
Cobalt	ND	0.0131	0.1	mg/Kg	01/03/2005 12:27	
Copper	ND	0.0151	0.2	mg/Kg	01/03/2005 12:27	
Lead	ND	0.0116	0.1	mg/Kg	01/03/2005 12:27	
Molybdenum	ND	0.0118	0.2	mg/Kg	01/03/2005 12:27	
Nickel	ND	0.0210	0.2	mg/Kg	01/03/2005 12:27	
Selenium	ND	0.0554	0.2	mg/Kg	01/03/2005 12:27	
Silver	ND	0.0145	0.1	mg/Kg	01/03/2005 12:27	
Thallium	ND	0.0151	0.1	mg/Kg	01/03/2005 12:27	
Vanadium	ND	0.0666	1.0	mg/Kg	01/03/2005 12:27	
Zinc	ND	0.0554	0.2	mg/Kg	01/03/2005 12:27	

Metals - ICP/MS

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Project: E4L190115

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CA DHS ELAP# 2496

## **Batch QC Report**

Prep(s): 3010A

LCS

LCSD

Test(s): 6020

**Laboratory Control Spike** 

2004/12/22-01.67-002 2004/12/22-01.67-003 Water

Extracted: 12/22/2004

Extracted: 12/22/2004

Received: 12/21/2004 10:10

Analyzed: 12/30/2004 16:26

Analyzed: 12/30/2004 16:30

QC Batch # 2004/12/22-01.67

Compound	Conc.	mg/L	Exp.Conc.	Recov	ery %	RPD	Ctrl.Lin	nits %	Fla	ags
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Antimony	0.103	0.104	0.1000	103.0	104.0	1.0	80-120	20		
Arsenic	0.103	0.103	0.1000	103.0	103.0	0.0	80-120	20		
Barium	0.104	0.104	0.1000	104.0	104.0	0.0	80-120	20		
Beryllium	0.109	0.108	0.1000	109.0	108.0	0.9	80-120	20		
Cadmium	0.102	0.104	0.1000	102.0	104.0	1.9	80-120	20		
Chromium	0.105	0.105	0.1000	105.0	105.0	0.0	80-120	20		
Cobalt	0.103	0.103	0.1000	103.0	103.0	0.0	80-120	20		
Copper	0.103	0.103	0.1000	103.0	103.0	0.0	80-120	20		
Lead	0.105	0.105	0.1000	105.0	105.0	0.0	80-120	20		
Molybdenum	0.104	0.104	0.1000	104.0	104.0	0.0	80-120	20		
Nickel	0.102	0.102	0.1000	102.0	102.0	0.0	80-120	20		
Selenium	0.102	0.105	0.1000	102.0	105.0	2.9	80-120	20		
Silver	0.102	0.104	0.1000	102.0	104.0	1.9	80-120	20		
Thallium	0.106	0.107	0.1000	106.0	107.0	0.9	80-120	20		
Vanadium	0.104	0.103	0.1000	104.0	103.0	1.0	80-120	20		
Zinc	0.102	0.106	0.1000	102.0	106.0	3.8	80-120	20		

Metals - ICP/MS

STL Los Angeles

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Project: E4L190115

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CA DHS ELAP# 2496

## **Batch QC Report**

Prep(s): 3050B Test(s): 6020

**Laboratory Control Spike** 

Soil

QC Batch # 2004/12/28-03.67

LCS 2004/12/28-03.67-002 LCSD 2004/12/28-03.67-003 Extracted: 12/28/2004 Extracted: 12/28/2004

Received: 12/21/2004 10:10

Analyzed: 12/30/2004 01:38 Analyzed: 12/30/2004 01:42

Conc. mg/Kg Exp.Conc. RPD Ctrl.Limits % Recovery % Flags Compound LCS LCSD LCS LCSD % Rec. **RPD** LCS **LCSD Antimony** 4.94 4.81 5.00 98.8 96.2 2.7 80-120 20 Arsenic 4.75 4.80 5.00 95.0 96.0 1.0 80-120 20 Barium 5.07 4.88 5.00 101.4 97.6 3.8 80-120 20 Beryllium 4.73 4.56 5.00 94.6 91.2 3.7 80-120 20 Cadmium 5.00 4.83 5.00 100.0 96.6 3.5 80-120 20 Chromium 5.20 5.09 5.00 104.0 101.8 2.1 80-120 20 Cobalt 5.03 4.90 5.00 100.6 2.6 98.0 80-120 20 Copper 4.85 5.06 5.00 101.2 97.0 4.2 80-120 20 Lead 5.05 4.86 5.00 101.0 97.2 3.8 80-120 20 Molybdenum 4.95 96.2 4.81 5.00 99.0 2.9 80-120 20 Nickel 5.01 4.88 5.00 100.2 97.6 2.6 80-120 20 Selenium 5.29 5.33 5.00 105.8 106.6 8.0 80-120 20 Silver 5.20 5.04 5.00 104.0 100.8 80-120 3.1 20 Thallium 4.80 4.63 5.00 96.0 92.6 3.6 80-120 20 Vanadium 4.88 4.58 5.00 97.6 91.6 6.3 80-120 20 Zinc 4.96 4.83 5.00 99.2 96.6 2.7 80-120 20

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2005/01/03-01.67-002

Project: E4L190115

LCS

LCSD

SEVERN TRENT LABORATORY

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Tel: (925) 484-1919 Fax: (925) 484-1096 www.stl-inc.com www.chromalab.com

CA DHS ELAP# 2496

## Batch QC Report

Prep(s): 3050B Test(s): 6020

Soil

**Laboratory Control Spike** 

Extracted: 01/03/2005

Received: 12/21/2004 10:10

QC Batch # 2005/01/03-01.67

2005/01/03-01.67-003 Extracted: 0

Extracted: 01/03/2005

Analyzed: 01/03/2005 12:30 Analyzed: 01/03/2005 12:33

Exp.Conc. RPD Ctrl.Limits % Conc. mg/Kg Recovery % Flags Compound LCS **LCSD** LCS LCSD % Rec. **RPD** LCS LCSD **Antimony** 5.12 5.12 5.00 102.4 102.4 0.0 80-120 20 Arsenic 5.32 5.32 5.00 106.4 106.4 0.0 80-120 20 Barium 5.33 5.19 5.00 106.6 103.8 2.7 80-120 20 Beryllium 5.39 5.00 107.8 80-120 5.37 107.4 0.4 20 Cadmium 5.30 5.22 5.00 106.0 104.4 80-120 1.5 20 Chromium 5.37 5.26 5.00 107.4 105.2 80-120 2.1 20 Cobalt 5.34 5.26 5.00 80-120 106.8 105.2 1.5 20 Copper 5.32 5.28 5.00 106.4 105.6 80-120 20 0.8 Lead 5.20 5.00 80-120 5.11 104.0 102.2 1.7 20 Molybdenum 5.32 5.24 5.00 106.4 80-120 104.8 1.5 20 Nickel 5.32 5.26 5.00 80-120 106.4 105.2 20 1.1 Selenium 5.37 5.40 5.00 107.4 108.0 0.6 80-120 20 Silver 5.40 5.42 5.00 108.0 108.4 80-120 0.4 20 Thallium 5.28 5.00 5.19 105.6 103.8 1.7 80-120 20 80-120 Vanadium 5.37 5.30 5.00 107.4 106.0 1.3 20 5.24 5.20 Zinc 5.00 104.8 104.0 8.0 80-120 20

Metals - ICP/MS

STL Los Angeles

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Phone: (714) 258-8610 Fax: (714) 258-0921

2004/12/28-03.67-005

2004/12/28-03.67-006

Project: E4L190115

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Tel: (925) 484-1919 Fax: (925) 484-1096 www.stl-inc.com www.chromalab.com

CA DHS ELAP# 2496

## **Batch QC Report**

Prep(s): 3050B Test(s): 6020

Matrix Spike ( MS / MSD ) Soil QC Batch # 2004/12/28-03.67

DP-12-25 >> MS

MS:

MSD:

Lab ID: 2004-12-0729 - 021

Received: 12/21/2004 10:10

Extracted: 12/28/2004

Analized: 12/30/2004 01:49

Dilution:

10.00

Extracted: 12/28/2004

Analized: 12/30/2004 02:09

Dilution:

10.00

Compound	Conc.	mę	g/Kg	Spk.Level	R	ecovery	%	Limits	%	FI	ags
	MS	MSD	Sample	mg/Kg	MS	MSD	RPD	Rec.	RPD	MS	MSD
Antimony	3.89	3.56	ND	4.95	78.6	74.0	6.0	75-125	20		M5
Arsenic	5.06	4.67	ND	4.95	102.2	97.1	5.1	75-125	20		
Barium	37.9	39.0	29.8	4.95	163.6	191.3	15.6	75-125	20	М3	М3
Beryllium	5.16	5.15	ND	4.95	104.2	107.1	2.7	75-125	20		
Cadmium	5.13	5.00	ND	4.95	103.6	104.0	0.4	75-125	20		
Chromium	9.29	8.71	3.48	4.95	117.4	108.7	7.7	75-125	20		
Cobalt	7.45	7.06	1.78	4.95	114.5	109.8	4.2	75-125	20		
Copper	9.54	9.47	3.56	4.95	120.8	122.9	1.7	75-125	20		
Lead	6.22	6.12	1.38	4.95	97.8	98.5	0.7	75-125	20		
Molybdenum	5.35	5.15	0.216	4.95	103.7	102.6	1.1	75-125	20		
Nickel	7.72	7.26	2.42	4.95	107.1	100.6	6.3	75-125	20		
Selenium	4.15	4.25	ND	4.95	83.8	88.4	5.3	75-125	20		
Silver	5.34	5.17	ND	4.95	107.9	107.5	0.4	75-125	20		
Thallium	4.93	4.87	ND	4.95	99.6	101.2	1.6	75-125	20		
Vanadium	12.9	13.0	6.64	4.95	126.5	132.2	4.4	75-125	20	M4	M4
Zinc	17.8	17.8	10.8	4.95	141.4	145.5	2.9	75-125	20	M4	M4

Metals - ICP/MS

STL Los Angeles

(

Attn.: Sabina Sudoko 1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L190115

SEVERN TRENT LABORATORY

STL San Francisco 1220 Quarry Lane Pleasanton, CA 94566

Tel: (925) 484-1919 Fax: (925) 484-1096 www.stl-inc.com www.chromalab.com

CA DHS ELAP# 2496

## **Batch QC Report**

Prep(s): 3050B Test(s): 6020

Matrix Spike ( MS / MSD ) Soil QC Batch # 2005/01/03-01.67

DP-10-1 >> MS

2005/01/03-01.67-005

2005/01/03-01.67-006

MS:

MSD:

Lab ID: 2004-12-0729 - 001

Extracted: 01/03/2005

Analized: 01/03/2005 12:39

Dilution: Extracted: 01/03/2005 Analized:

Received: 12/21/2004 10:10

10.00

01/03/2005 12:42

Dilution:

10.00

Compound	Conc.	m	ıg/Kg	Spk.Level	R	ecovery	%	Limits	s %	FI	ags
•	MS	MSD	Sample	mg/Kg	MS	MSD	RPD	Rec.	RPD	MS	MSD
Antimony	5.21	4.92	0.460	4.85	97.9	90.1	8.3	75-125	20		
Arsenic	5.74	5.43	ND	4.85	118.4	109.7	7.6	75-125	20		Ì
Barium	32.3	34.0	26.8	4.85	113.4	145.5	24.8	75-125	20		мз
Beryllium	5.73	5.55	ND	4.85	118.1	112.1	5.2	75-125	20		
Cadmium	5.65	5.46	ND	4.85	116.5	110.3	5.5	75-125	20		İ
Chromium	7.71	8.05	1.90	4.85	119.8	124.2	3.6	75-125	20		
Cobalt	7.42	8.44	1.94	4.85	113.0	131.3	15.0	75-125	20		М4
Copper	9.07	9.92	4.37	4.85	96.9	112.1	14.5	75-125	20		
Lead	6.40	6.32	0.809	4.85	115.3	111.3	3.5	75-125	20		
Molybdenum	5.63	5.57	0.282	4.85	110.3	106.8	3.2	75-125	20		
Nickel	8.11	8.16	2.43	4.85	117.1	115.8	1.1	75-125	20		
Selenium	7.43	7.63	ND	4.85	153.2	154.1	0.6	75-125	20	M4	M4
Silver	5.58	5.47	ND	4.85	115.1	110.5	4.1	75-125	20		
Thallium	5.12	5.11	ND	4.85	105.6	103.2	2.3	75-125	20		
Vanadium	15.5	14.5	7.83	4.85	158.1	134.7	16.0	75-125	20	M4	M4
Zinc	17.3	18.0	11.9	4.85	111.3	123.2	10.1	75-125	20		

Metals - ICP/MS

STL Los Angeles

(

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Attn.: Sabina Sudoko 1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L190115

SEVERN TRENT LABORATORY

STL San Francisco 1220 Quarry Lane Pleasanton, CA 94566

Tel: (925) 484-1919 Fax: (925) 484-1096 www.stl-inc.com www.chromalab.com

CA DHS ELAP# 2496

## **Legend and Notes**

Received: 12/21/2004 10:10

# Analysis Flag

Result Flag

М3

Sample > 4x spike concentration.

M4

MS/MSD spike recoveries were above acceptance limits.

See blank spike (LCS).

M5

MS/MSD spike recoveries were below acceptance limits.

See blank spike (LCS).

2004-12-0729 **Custody Record** Chain of STL-4124 (2001)

Severn Trent Laboratories, Inc. SEVERN TRENT

**(**...

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Contract/Purchase Orden/Quote No	¥	Matrix	Containers & Preservatives	ETU.		Condition	Conditions of Receipt
Sample I.D. No. and Description (Containers for each sample may be combined on one line)	MA SANASA	HOS POS	HOWN COVIC HOWN IOH CONH FOSCH	[] (00)			
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Chain of Custody Record

STE-4124 (0901)

70:512 San Francisco

SEVERN STL TRENT Severn Trent Laboratories, Inc.

J8824

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Address	Telepho	Telephone Number (Area Code	West Maroon		Cab Number	90
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Contract/Purenase Oxde/Quote No		Matrix	Containers & Preservatives	य्यु र १ जर		Special Instructions/ Conditions of Receipt
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Chain of Custody Record

P2F0-51-1405

TRENT STL Severn Trent Laboratories, Inc.

ps896

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Special Instructions/ Conditions of Receipt Chain of Custody Number Analysis (Attach list if more space is needed) Lab Munifier Oate 0000 HOPN TVV2 Containers & Preservatives HOPN Project Manager

SACOON
Telephone Number (And Cock) First Number EONH × rosen SORGW) 105 Matrix Camer/Wayoll Number P05 12-17-01 10-20 220 1031 Time 0831 Date State | Ztp Code Sample 1.D. No. and Description (Containers for each sample may be combined on one ling) CONTROLP CONTROL (GOILS Propect Name and Location (Stein)

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DISTRIBUTION: WHITE HEILMOR TO CHENT WITH PROOF CANARY - STAPS WITH THE SAMOID, PINK FIELD CODY

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A Disposal By Lab Archive For OC Requirements (Spacify)

Return To Chent

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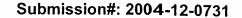
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Swin tretant

On-Hazard Frammable Turn Around Tane Required

Possible Hazard Identification

Sangle Disposal





STL Los Angeles

January 04, 2005

1721 South Grand Avenue Santa Ana, CA 92705

Attn.:

Sabina Sudoko

Project:

E4L170439

Dear Ms. Sudoko,

Attached is our report for your samples received on 12/21/2004 10:10 This report has been reviewed and approved for release. Reproduction of this report is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after 02/04/2005 unless you have requested otherwise.

We appreciate the opportunity to be of service to you. If you have any questions, please call me at (925) 484-1919.

You can also contact me via email. My email address is: dsharma@stl-inc.com

Sincerely,

Dimple Sharma Project Manager

haema



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Submission: 2004-12-0731

# Mercury (Hg)

STL Los Angeles Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439 Received: 12/21/2004 10:10

## **Samples Reported**

Sample Name	Date Sampled	Matrix	Lab#
DP-1-1	12/16/2004 07:19	Soil	1
DP-1-5	12/16/2004 07:53	Soil	2
DP-1-10	12/16/2004 08:00	Soil	3
DP-1-15	12/16/2004 08:05	Soil	4
DP-1-20	12/16/2004 08:12	Soil	5
DP-1-25	12/16/2004 08:27	Soil	6
DP-2-1	12/16/2004 07:47	Soil	7
DP-2-5	12/16/2004 08:37	Soil	8
DP-2-10	12/16/2004 08:42	Soil	9
DP-2-15	12/16/2004 08:52	Soil	10
DP-2-20	12/16/2004 09:03	Soil	11
DP-2-25	12/16/2004 09:14	Soil	12
DP-3-1	12/16/2004 08:06	Soil	13
DP-3-5	12/16/2004 09:40	Soil	14
DP-3-10	12/16/2004 09:45	Soil	15
DP-3-15	12/16/2004 09:51	Soil	16
DP-3-20	12/16/2004 10:02	Soil	17
DP-3-25	12/16/2004 10:09	Soil	18
DP-4-1	12/16/2004 08:19	Soil	19
DP-4-5	12/16/2004 11:41	Soil	20
DP-4-10	12/16/2004 11:46	Soil	21
DP-4-15	12/16/2004 11:50	Soil	22
DP-4-20	12/16/2004 11:58	Soil	23
DP-4-25	12/16/2004 12:12	Soil	24
DP-5-1	12/16/2004 10:23	Soil	25
DP-5-5	12/16/2004 10:59	Soil	26
DP-5-10	12/16/2004 11:04	Soil	27
DP-5-15	12/16/2004 11:11	Soil	28
DP-5-20	12/16/2004 11:19	Soil	29
DP-5-25	12/16/2004 11:29	Soil	30
DP-6-1	12/16/2004 10:31	Soil	31
DP-6-5	12/16/2004 13:20	Soil	32
DP-6-10	12/16/2004 13:27	Soil	33
DP-6-15	12/16/2004 13:39	Soil	34



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Submission: 2004-12-0731

# Mercury (Hg)

STL Los Angeles Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439 Received: 12/21/2004 10:10

## **Samples Reported**

Sample Name	Date Sampled	Matrix	Lab#
DP-6-20	12/16/2004 13:45	Soil	35
DP-6-25	12/16/2004 13:54	Soil	36
DP-7-1	12/16/2004 10:35	Soil	37
DP-7-5	12/16/2004 14:02	Soil	38
DP-7-10	12/16/2004 14:02	Soil	39
DP-7-15	12/16/2004 14:08	Soil	40
DP-7-20	12/16/2004 14:15	Soil	41
DP-7-25	12/16/2004 14:25	Soil	42
DP-8-1	12/16/2004 10:46	Soil	43
DP-8-5	12/16/2004 15:35	Soil	44
DP-8-10	12/16/2004 15:38	Soil	45
DP-8-15	12/16/2004 15:44	Soil	46
DP-8-20	12/16/2004 15:53	Soil	47
DP-8-25	12/16/2004 16:03	Soil	48
DP-9-1	12/16/2004 10:51	Soil	49
DP-9-5	12/16/2004 14:51	Soil	50
DP-9-10	12/16/2004 14:58	Soil	51
DP-9-15	12/16/2004 15:03	Soil	52
DP-9-20	12/16/2004 15:08	Soil	53
DP-9-25	12/16/2004 15:14	Soil	54
EB-1-121604	12/16/2004 15:25	Water	55
FB-1-121604	12/16/2004 15:35	Water	56



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Submission: 2004-12-0731

# Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439

Received: 12/21/2004 10:10

Prep(s):

7471A

Test(s):

7471A

Sample ID: DP-1-1

Lab ID:

2004-12-0731 - 1

Sampled: Matrix:

12/16/2004 07:19 Soil Extracted:

12/21/2004 15:51

QC Batch#: 2004/12/21-04.16

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Mercury	ND	0.050	mg/Kg	1.00	12/22/2004 10:16	



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Submission: 2004-12-0731

# Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439 Received: 12/21/2004 10:10

Prep(s): 7471A Test(s): 7471A

Sample ID: **DP-1-5** Lab ID: 2004-12-0731 - 2

Sampled: 12/16/2004 07:53 Extracted: 12/21/2004 15:51

Matrix: Soil QC Batch#: 2004/12/21-04.16

 Compound
 Conc.
 RL
 Unit
 Dilution
 Analyzed
 Flag

 Mercury
 ND
 0.050
 mg/Kg
 1.00
 12/22/2004 10:18



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Submission: 2004-12-0731

### Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439 Received: 12/21/2004 10:10

Prep(s): 7471A Test(s): 7471A

 Sample ID: DP-1-10
 Lab ID: 2004-12-0731 - 3

 Sampled: 12/16/2004 08:00
 Extracted: 12/21/2004 15:51

Matrix: Soil QC Batch#: 2004/12/21-04.16

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Mercury	ND	0.050	mg/Kg	1.00	12/22/2004 10:19	



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Submission: 2004-12-0731

## Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439 Received: 12/21/2004 10:10

Prep(s): 7471A

Test(s): 7471A Sample ID: DP-1-15 Lab ID:

2004-12-0731 - 4 Sampled: 12/16/2004 08:05 Extracted: 12/21/2004 15:51

Matrix: Soil QC Batch#: 2004/12/21-04.16

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Mercury	0.054	0.050	mg/Kg	1.00	12/22/2004 10:23	



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Submission: 2004-12-0731

### Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439 Received: 12/21/2004 10:10

Prep(s): 7471A Test(s): 7471A

Sample ID: **DP-1-20** Lab ID: 2004-12-0731 - 5 Sampled: 12/16/2004 08:12 Extracted: 12/21/2004 15:51

Matrix: Soil QC Batch#: 2004/12/21-04.16



Submission: 2004-12-0731

## Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439 Received: 12/21/2004 10:10

Prep(s): 7471A Test(s): 7471A

Sample ID: **DP-1-25** Lab ID: 2004-12-0731 - 6
Sampled: 12/16/2004 08:27 Extracted: 12/21/2004 15:51

Matrix: Soil QC Batch#: 2004/12/21-04.16

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Mercury	ND	0.050	mg/Kg	1.00	12/22/2004 10:25	

4.6



Submission: 2004-12-0731

# Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439

Received: 12/21/2004 10:10

Prep(s): 7471A

Sample ID: DP-2-1

Sampled: 12/16/2004 07:47

Matrix: Soil

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Test(s): 7471A

Lab ID:

2004-12-0731 - 7

Extracted:

12/21/2004 15:51

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Mercury	ND	0.050	mg/Kg	1.00	12/22/2004 10:26	



.

Submission: 2004-12-0731

## Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439 Received: 12/21/2004 10:10

Prep(s): 7471A Test(s): 7471A

Sample ID: **DP-2-5** Lab ID: 2004-12-0731 - 8
Sampled: 12/16/2004 08:37 Extracted: 12/21/2004 15:51

Matrix: Soil QC Batch#: 2004/12/21-04.16



Submission: 2004-12-0731

## Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439

Received: 12/21/2004 10:10

Prep(s):

7471A

Test(s):

7471A

Sample ID: DP-2-10

Lab ID:

2004-12-0731 - 9

Sampled: 12/16/2004 08:42

Extracted:

12/21/2004 15:51

Matrix:

Soil

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Mercury	ND	0.050	mg/Kg	1.00	12/22/2004 10:28	



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bar.

Submission: 2004-12-0731

## Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439 Received: 12/21/2004 10:10

Prep(s): 7471A Test(s): 7471A

Sample ID: **DP-2-15** Lab ID: 2004-12-0731 - 10

Sampled: 12/16/2004 08:52 Extracted: 12/21/2004 15:51

Matrix: Soil QC Batch#: 2004/12/21-04.16



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Submission: 2004-12-0731

### Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439

Received: 12/21/2004 10:10

Prep(s): 7471A

Sample ID: DP-2-20

Sampled: 12/16/2004 09:03

Matrix: Soil

Test(s): 7471A

Lab ID:

2004-12-0731 - 11

Extracted:

12/21/2004 15:51

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Mercury	ND	0.050	mg/Kg	1.00	12/22/2004 10:31	



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Submission: 2004-12-0731

## Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439 Received: 12/21/2004 10:10

Prep(s): 7471A

Test(s): 7471A

Sample ID: DP-2-25

Lab ID: 2004-12-0731 - 12

Sampled: 12/16/2004 09:14

Extracted: 12/21/2004 15:51

Matrix: Soil

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Mercury	ND	0.050	mg/Kg	1.00	12/22/2004 10:32	



Submission: 2004-12-0731

### Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439

Received: 12/21/2004 10:10

Prep(s):

7471A

Test(s):

7471A

Sample ID: DP-3-1

Lab ID:

2004-12-0731 - 13

Sampled: 12/16/2004 08:06

Extracted:

12/21/2004 15:51

Matrix:

Soil

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Mercury	ND	0.050	mg/Kg	1.00	12/22/2004 10:33	



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Submission: 2004-12-0731

### Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439 Received: 12/21/2004 10:10

Prep(s): 7471A Test(s): 7471A

Sample ID: **DP-3-5** Lab ID: 2004-12-0731 - 14

 Sampled:
 12/16/2004 09:40
 Extracted:
 12/22/2004 05:49

 Matrix:
 Soil
 QC Batch#:
 2004/12/22-02.16



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Submission: 2004-12-0731

### Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439

Received: 12/21/2004 10:10

Prep(s):

7471A

Test(s):

7471A

Sample ID: DP-3-10

Lab ID:

2004-12-0731 - 15

Sampled:

12/16/2004 09:45

Extracted:

12/22/2004 05:49

Matrix:

Soil

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Mercury	ND	0.050	mg/Kg	1.00	12/22/2004 10:42	



Submission: 2004-12-0731

### Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439 Received: 12/21/2004 10:10

Prep(s): 7471A

71A Test(s): 7471A

Sample ID: DP-3-15

Extracted: 12/22/2004 05:49

2004-12-0731 - 16

Sampled: 12/16/2004 09:51

Matrix: Soil

QC Batch#: 2004/12/22-02.16

Lab ID:

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Mercury	ND	0.050	mg/Kg	1.00	12/22/2004 10:43	



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Submission: 2004-12-0731

### Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439 Received: 12/21/2004 10:10

Prep(s): 7471A Test(s): 7471A

Sample ID: **DP-3-20** Lab ID: 2004-12-0731 - 17

 Sampled:
 12/16/2004 10:02
 Extracted:
 12/22/2004 05:49

 Matrix:
 Soil
 QC Batch#:
 2004/12/22-02.16



Submission: 2004-12-0731

## Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439

Received: 12/21/2004 10:10

Prep(s): 7471A

Sample ID: DP-3-25

Sampled: 12/16/2004 10:09

Matrix:

Soil

Test(s): 7471A

Lab ID:

2004-12-0731 - 18

Extracted:

12/22/2004 05:49

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Mercury	ND	0.050	mg/Kg	1.00	12/22/2004 10:46	



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Submission: 2004-12-0731

7471A

### Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439 Received: 12/21/2004 10:10

Prep(s): 7471A Test(s):

Sample ID: **DP-4-1** Lab ID: 2004-12-0731 - 19
Sampled: 12/16/2004 08:19 Extracted: 12/22/2004 05:49

Sampled: 12/16/2004 08:19 Extracted: 12/22/2004 05:49

Matrix: Soil QC Batch#: 2004/12/22-02.16



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Submission: 2004-12-0731

### Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439 Received: 12/21/2004 10:10

Prep(s): 7471A Test(s): 7471A

Sample ID: **DP-4-5** Lab ID: 2004-12-0731 - 20 Sampled: 12/16/2004 11:41 Extracted: 12/22/2004 05:49

Matrix: Soil QC Batch#: 2004/12/22-02.16



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Submission: 2004-12-0731

### Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439 Received: 12/21/2004 10:10

Prep(s): 7471A Test(s): 7471A

Sample ID: **DP-4-10** Lab ID: 2004-12-0731 - 21 Sampled: 12/16/2004 11:46 Extracted: 12/22/2004 05:49

Matrix: Soil QC Batch#: 2004/12/22-02.16



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Submission: 2004-12-0731

### Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439

Received: 12/21/2004 10:10

Prep(s):

7471A

Test(s):

7471A

Sample ID: DP-4-15

Lab ID:

2004-12-0731 - 22

Sampled: 12/16/2004 11:50

Extracted:

12/22/2004 05:49

Matrix:

Soil

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Mercury	ND	0.050	mg/Kg	1.00	12/22/2004 10:55	



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Submission: 2004-12-0731

### Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439 Received: 12/21/2004 10:10

Prep(s): 7471A Test(s): 7471A

Sample ID: **DP-4-20** Lab ID: 2004-12-0731 - 23

Sampled: 12/16/2004 11:58 Extracted: 12/22/2004 05:49

Matrix: Soil QC Batch#: 2004/12/22-02.16

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Mercury	ND	0.050	mg/Kg	1.00	12/22/2004 10:56	



Submission: 2004-12-0731

### Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439

Received: 12/21/2004 10:10

7471A

Prep(s): 7471A Test(s):

Sample ID: **DP-4-25** Lab ID: 2004-12-0731 - 24

Sampled: 12/16/2004 12:12 Extracted: 12/22/2004 05:49

Matrix: Soil QC Batch#: 2004/12/22-02.16



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Submission: 2004-12-0731

## Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439

Received: 12/21/2004 10:10

Prep(s): 7471A

Sample ID: DP-5-1

Test(s): Lab ID:

7471A

2004-12-0731 - 25

Sampled:

12/16/2004 10:23

Extracted:

12/22/2004 05:49

Matrix:

Soil

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Mercury	ND	0.050	mg/Kg	1.00	12/22/2004 10:59	



Submission: 2004-12-0731

### Mercury (Hg)

STL Los Angeles

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Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439

Received: 12/21/2004 10:10

Prep(s): 7471A Test(s): 7471A

Sample ID: **DP-5-5** Lab ID: 2004-12-0731 - 26

Sampled: 12/16/2004 10:59 Extracted: 12/22/2004 05:49

Matrix: Soil QC Batch#: 2004/12/22-02.16



Submission: 2004-12-0731

### Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439

Received: 12/21/2004 10:10

Prep(s): 7471A

Sample ID: DP-5-10

12/16/2004 11:04

Sampled: 12/16/20 Matrix: Soil Test(s):

7471A

Lab ID:

2004-12-0731 - 27

Extracted:

12/22/2004 05:49

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Mercury	ND	0.050	mg/Kg	1.00	12/22/2004 11:01	



Submission: 2004-12-0731

### Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439 Received: 12/21/2004 10:10

Prep(s): 7471A Test(s): 7471A

Sample ID: **DP-5-15** Lab ID: 2004-12-0731 - 28
Sampled: 12/16/2004 11:11 Extracted: 12/22/2004 05:49

Matrix: Soil QC Batch#: 2004/12/22-02.16

 Compound
 Conc.
 RL
 Unit
 Dilution
 Analyzed
 Flag

 Mercury
 ND
 0.050
 mg/Kg
 1.00
 12/22/2004 11:02

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Submission: 2004-12-0731

#### Mercury (Hg)

Received: 12/21/2004 10:10

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439

Prep(s): 7471A Test(s): 7471A

Sample ID: **DP-5-20** Lab ID: 2004-12-0731 - 29

Sampled: 12/16/2004 11:19 Extracted: 12/22/2004 05:49

Matrix: Soil QC Batch#: 2004/12/22-02.16



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Submission: 2004-12-0731

### Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439 Received: 12/21/2004 10:10

Prep(s): 7471A Test(s): 7471A

Sample ID: **DP-5-25** Lab ID: 2004-12-0731 - 30
Sampled: 12/16/2004 11:29 Extracted: 12/22/2004 05:49

Matrix: Soil QC Batch#: 2004/12/22-02.16



Submission: 2004-12-0731

7471A

## Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439 Received: 12/21/2004 10:10

Prep(s): 7471A

Test(s): Sample ID: DP-6-1 Lab ID: 2004-12-0731 - 31

Sampled: 12/16/2004 10:31 Extracted: 12/22/2004 05:49

Matrix: Soil QC Batch#: 2004/12/22-02.16

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Mercury	0.073	0.050	mg/Kg	1.00	12/22/2004 11:08	



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Submission: 2004-12-0731

### Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439

Sampled:

Received: 12/21/2004 10:10

Prep(s): 7471A

Sample ID: DP-6-5

12/16/2004 13:20

Matrix: Soil

Test(s): 7471A

Lab ID: 20

2004-12-0731 - 32

Extracted:

12/22/2004 05:49

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Mercury	ND	0.050	mg/Kg	1.00	12/22/2004 11:10	



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Submission: 2004-12-0731

### Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439

Received: 12/21/2004 10:10

Prep(s): 7471A Test(s): 7471A

Sample ID: **DP-6-10** Lab ID: 2004-12-0731 - 33
Sampled: 12/16/2004 13:27 Extracted: 12/22/2004 05:49

Matrix: Soil QC Batch#: 2004/12/22-02.16



Submission: 2004-12-0731

### Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439

Received: 12/21/2004 10:10

Prep(s):

7471A

Test(s):

7471A

Sample ID: DP-6-15

Lab ID:

2004-12-0731 - 34

Sampled:

12/16/2004 13:39

Extracted:

12/22/2004 07:30

Matrix:

Soil

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Mercury	0.029	0.050	mg/Kg	1.00	12/27/2004 06:55	J



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Submission: 2004-12-0731

### Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439 Received: 12/21/2004 10:10

Prep(s): 7471A Test(s): 7471A

Sample ID: **DP-6-20** Lab ID: 2004-12-0731 - 35

Sampled: 12/16/2004 13:45 Extracted: 12/22/2004 07:30 Matrix: Soil QC Batch#: 2004/12/22-04.16



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Submission: 2004-12-0731

### Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439

Received: 12/21/2004 10:10

Prep(s): 7471A

Test(s):

7471A

Sample ID: DP-6-25

Lab ID:

2004-12-0731 - 36

Sampled:

12/16/2004 13:54

Extracted:

12/22/2004 07:30

Matrix:

Soil

QC Batch#: 2004/12/22-04.16

Compound Conc. RL Unit Dilution Analyzed Flag Mercury 1.00 0.028 0.050 mg/Kg 12/27/2004 07:00 J



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Submission: 2004-12-0731

### Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439 Received: 12/21/2004 10:10

Prep(s): 7471A Test(s): 7471A

Sample ID: **DP-7-1** Lab ID: 2004-12-0731 - 37

Sampled: 12/16/2004 10:35 Extracted: 12/22/2004 07:30 Matrix: Soil QC Batch#: 2004/12/22-04.16

Matrix: Soil QC Batch#: 2004/12/22-04.16

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Mercury	0.036	0.050	mg/Kg	1.00	12/27/2004 07:01	J



Submission: 2004-12-0731

### Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439 Received: 12/21/2004 10:10

Prep(s): 7471A Test(s): 7471A

Sample ID: **DP-7-5** Lab ID: 2004-12-0731 - 38

Sampled: 12/16/2004 14:02 Extracted: 12/22/2004 07:30 Matrix: Soil QC Batch#: 2004/12/22-04.16

 Compound
 Conc.
 RL
 Unit
 Dilution
 Analyzed
 Flag

 Mercury
 0.012
 0.050
 mg/Kg
 1.00
 12/27/2004 07:02
 J

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## Mercury (Hg)

STL Los Angeles

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Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439 Received: 12/21/2004 10:10

Prep(s): 7471A Test(s): 7471A

Sample ID: **DP-7-10** Lab ID: 2004-12-0731 - 39

 Sampled:
 12/16/2004 14:02
 Extracted:
 12/22/2004 07:30

 Matrix:
 Soil
 QC Batch#:
 2004/12/22-04.16

 Compound
 Conc.
 RL
 Unit
 Dilution
 Analyzed
 Flag

 Mercury
 0.012
 0.050
 mg/Kg
 1.00
 12/27/2004 07:06
 J



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Submission: 2004-12-0731

# Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439

Received: 12/21/2004 10:10

Prep(s): 7471A

Sample ID: DP-7-15

Sampled: 12/16/2004 14:08

Matrix: Soil

Test(s): 7471A

Lab ID:

2004-12-0731 - 40

Extracted:

12/22/2004 07:30

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Mercury	0.017	0.050	mg/Kg	1.00	12/27/2004 07:07	J



Submission: 2004-12-0731

# Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439

Received: 12/21/2004 10:10

Prep(s): 7471A

Sample ID: DP-7-20

Sampled: 12/16/2004 14:15

Matrix: Soil

Test(s): 7471A

Lab ID: 2004-12-0731 - 41

Extracted: 12/22/2004 07:30

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Mercury	0.020	0.050	mg/Kg	1.00	12/27/2004 07:08	J



Submission: 2004-12-0731

### Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439

Received: 12/21/2004 10:10

Prep(s): 7471A

Sample ID: DP-7-25

Sampled: 12/16/2004 14:25

Matrix: Soil

Test(s): 7471A

Lab ID:

2004-12-0731 - 42

Extracted:

12/22/2004 07:30

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Mercury	0.011	0.050	mg/Kg	1.00	12/27/2004 07:10	J



Submission: 2004-12-0731

### Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439 Received: 12/21/2004 10:10

Prep(s): 7471A Test(s): 7471A

Sample ID: **DP-8-1** Lab ID: 2004-12-0731 - 43

Sampled: 12/16/2004 10:46 Extracted: 12/22/2004 07:30 Matrix: Soil QC Batch#: 2004/12/22-04.16

 Compound
 Conc.
 RL
 Unit
 Dilution
 Analyzed
 Flag

 Mercury
 0.068
 0.050
 mg/Kg
 1.00
 12/27/2004 07:11



Submission: 2004-12-0731

# Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439

Received: 12/21/2004 10:10

Prep(s): 7471A

Sample ID: DP-8-5

Sampled: 12/16/2004 15:35

Matrix: Soil

Test(s): 7471A

Lab ID: 2

2004-12-0731 - 44

Extracted:

12/22/2004 07:30

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Mercury	0.13	0.050	mg/Kg	1.00	12/27/2004 07:12	



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Submission: 2004-12-0731

### Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439 Received: 12/21/2004 10:10

Prep(s): 7471A Test(s): 7471A

Sample ID: **DP-8-10** Lab ID: 2004-12-0731 - 45 Sampled: 12/16/2004 15:38 Extracted: 12/22/2004 07:30

Matrix: Soil QC Batch#: 2004/12/22-04.16

 Compound
 Conc.
 RL
 Unit
 Dilution
 Analyzed
 Flag

 Mercury
 0.014
 0.050
 mg/Kg
 1.00
 12/27/2004 07:13
 J



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Submission: 2004-12-0731

## Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439

Received: 12/21/2004 10:10

Prep(s):

7471A

Test(s):

7471A

Sample ID: DP-8-15

Lab ID:

2004-12-0731 - 46

Sampled: 12/16/2004 15:44

Extracted:

12/22/2004 07:30

Matrix:

Soil

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Mercury	0.028	0.050	mg/Kg	1.00	12/27/2004 07:14	J



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Submission: 2004-12-0731

## Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439 Received: 12/21/2004 10:10

Prep(s): 7471A Test(s): 7471A

Sample ID: **DP-8-20** Lab ID: 2004-12-0731 - 47

 Sampled:
 12/16/2004 15:53
 Extracted:
 12/22/2004 07:30

 Matrix:
 Soil
 QC Batch#:
 2004/12/22-04.16

 Compound
 Conc.
 RL
 Unit
 Dilution
 Analyzed
 Flag

 Mercury
 0.037
 0.050
 mg/Kg
 1.00
 12/27/2004 07:16
 J



# Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439

Received: 12/21/2004 10:10

Prep(s): 7471A

Sample ID: DP-8-25

Lab

Sampled: 12/16/2004 16:03

Matrix: Soil

Test(s): 7471A Lab ID: 2004-12-0731 - 48

Extracted: 12/22/2004 07:30

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Mercury	0.044	0.050	mg/Kg	1.00	12/27/2004 07:17	J



# Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Sample ID: DP-9-1

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439

Received: 12/21/2004 10:10

Prep(s):

7471A

Test(s): Lab ID:

7471A

2004-12-0731 - 49

Sampled: 12/16/2004 10:51

Extracted:

12/22/2004 07:30

Matrix:

Soil

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Mercury	0.091	0.050	mg/Kg	1.00	12/27/2004 08:59	



### Mercury (Hg)

STL Los Angeles

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Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439 Received: 12/21/2004 10:10

Prep(s): 7471A Test(s): 7471A

Sample ID: **DP-9-5** Lab ID: 2004-12-0731 - 50
Sampled: 12/16/2004 14:51 Extracted: 12/22/2004 07:30

Matrix: Soil QC Batch#: 2004/12/22-04.16

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Mercury	0.029	0.050	mg/Kg	1.00	12/27/2004 09:00	J



## Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439

Received: 12/21/2004 10:10

Prep(s): 7471A

Test(s):

7471A

Sample ID: DP-9-10

Lab ID:

2004-12-0731 - 51

Sampled: 12/16/2004 14:58

Extracted:

12/22/2004 07:30

Matrix: Soil

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Mercury	0.021	0.050	mg/Kg	1.00	12/27/2004 09:01	J



### Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Severn Trent Laboratories, Inc.

Project: E4L170439 Received: 12/21/2004 10:10

Prep(s): 7471A Test(s): 7471A

Sample ID: **DP-9-15** Lab ID: 2004-12-0731 - 52 Sampled: 12/16/2004 15:03 Extracted: 12/22/2004 07:30

Matrix: Soil QC Batch#: 2004/12/22-04.16

 Compound
 Conc.
 RL
 Unit
 Dilution
 Analyzed
 Flag

 Mercury
 0.017
 0.050
 mg/Kg
 1.00
 12/27/2004 09:02
 J

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### Mercury (Hg)

STL Los Angeles

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Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439 Received: 12/21/2004 10:10

Prep(s): 7471A Test(s): 7471A

Sample ID: **DP-9-20** Lab ID: 2004-12-0731 - 53
Sampled: 12/16/2004 15:08 Extracted: 12/22/2004 07:30

Matrix: Soil QC Batch#: 2004/12/22-04.16

 Compound
 Conc.
 RL
 Unit
 Dilution
 Analyzed
 Flag

 Mercury
 0.030
 0.050
 mg/Kg
 1.00
 12/27/2004 09:04
 J



Submission: 2004-12-0731

# Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439

Received: 12/21/2004 10:10

Prep(s): 7471A

Lab ID:

7471A

Sample ID: DP-9-25

Test(s):

2004-12-0731 - 54

Sampled: 12/16/2004 15:14

Extracted:

12/22/2004 06:28

Matrix: Soil

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Mercury	ND	0.050	mg/Kg	1.00	12/22/2004 11:16	



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Submission: 2004-12-0731

# Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439

Received: 12/21/2004 10:10

Prep(s): 7470A

Test(s):

7470A

Sample ID: EB-1-121604

Lab ID:

2004-12-0731 - 55

Sampled: 12/16/2004 15:25

Extracted:

12/22/2004 10:24

Matrix: Water

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Mercury	ND	0.00020	mg/L	1.00	12/27/2004 09:35	



Submission: 2004-12-0731

# Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439

Received: 12/21/2004 10:10

Prep(s): 7470A

470A Test(s): 7470A

Sample ID: FB-1-121604

Lab ID: 2004-12-0731 - 56

Sampled: 12/16/2004 15:35

Extracted: 12/22/2004 10:24

Matrix: Water QC Batch#: 2004/12/22-05.16

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Mercury	ND	0.00020	mg/L	1.00	12/27/2004 09:36	



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Submission: 2004-12-0731

### Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439

Received: 12/21/2004 10:10

#### **Batch QC Report**

Prep(s): 7471A

**Method Blank** 

MB: 2004/12/21-04.16-040

Soil

Test(s): 7471A

QC Batch # 2004/12/21-04.16

Date Extracted: 12/21/2004 15:51

Compound	Conc.	RL	Unit	Analyzed	Flag
Mercury	ND	0.050	mg/Kg	12/22/2004 09:59	



Submission: 2004-12-0731

# Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439

Received: 12/21/2004 10:10

#### **Batch QC Report**

Prep(s): 7471A Method Blank

MB: 2004/12/22-02.16-071

Soil

Test(s): 7471A

QC Batch # 2004/12/22-02.16

Date Extracted: 12/22/2004 05:49

Compound	Conc.	RL	Unit	Analyzed	Flag
Mercury	ND	0.050	mg/Kg	12/22/2004 10:37	



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Submission: 2004-12-0731

## Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439

Received: 12/21/2004 10:10

#### **Batch QC Report**

Prep(s): 7471A

**Method Blank** 

MB: 2004/12/22-03.16-100

Soil

Test(s): 7471A QC Batch # 2004/12/22-03.16

Date Extracted: 12/22/2004 06:28

Compound	Conc.	RL	Unit	Analyzed	Flag
Mercury	ND	0.050	mg/Kg	12/22/2004 11:12	



### Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439

Received: 12/21/2004 10:10

#### **Batch QC Report**

Prep(s): 7471A Method Blank

metriod blank

MB: 2004/12/22-04.16-011

Soil

Test(s): 7471A

QC Batch # 2004/12/22-04.16

Date Extracted: 12/22/2004 07:30

Compound	Conc.	RL	Unit	Analyzed	Flag
Mercury	ND	0.050	mg/Kg	12/27/2004 06:51	



# Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439

Received: 12/21/2004 10:10

#### **Batch QC Report**

Prep(s): 7470A

**Method Blank** 

MB: 2004/12/22-05.16-104

Water

Test(s): 7470A

QC Batch # 2004/12/22-05.16

Date Extracted: 12/22/2004 10:24

Compound	Conc.	RL	Unit	Analyzed	Flag
Mercury	ND	0.0002	mg/L	12/27/2004 09:27	



# Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439

				Batch QC Re	eport	i peni					
Prep(s):	7471A									Test(s):	7471A
Labora	tory Control Spi	ike		Soil			Q	C Batch	# 20	04/12/21	-04.16
LCS	2004/12/21-04	4.16-041		Extracted: 12/21/2004				Analyze	ed: 12/	/22/2004	10:01
LCSD	SD 2004/12/21-04.16-042 Extracted: 1				12/21/20	004		Analyze	ed: 12	/22/2004	10:02
Compound		Conc.	mg/Kg	Exp.Conc.	Reco	very %	RPD	Ctrl.Lin	nits %	Fla	ags
•		LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Mercury		0.524	0.531	0.500	104.8	106.2	1.3	85-115	20		



### Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439

Received: 12/21/2004 10:10

#### Batch QC Report

Prep(s): 7471A

Test(s): 7471A

**Laboratory Control Spike** 

Soil

QC Batch # 2004/12/22-02.16

LCS

2004/12/22-02.16-072

Extracted: 12/22/2004

Analyzed: 12/22/2004 10:38

LCSD

2004/12/22-02.16-073

Extracted: 12/22/2004

Analyzed: 12/22/2004 10:39

Compound	Conc. mg/Kg Exp.Conc. Recovery %		. Recovery % F		overy % RPD Ctrl.Limits		nits %	Flags		
·	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Mercury	0.532	0.526	0.500	106.4	105.2	1.1	85-115	20		



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Submission: 2004-12-0731

# Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439 Received: 12/21/2004 10:10

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M at	rn.	f ## :	-	

Prep(s): 7471A Test(s): 7471A

Laboratory Control Spike

Soil QC I

QC Batch # 2004/12/22-03.16

LCS

2004/12/22-03.16-101

Extracted: 12/22/2004

Analyzed: 12/22/2004 11:13

LCSD

2004/12/22-03.16-102

Extracted: 12/22/2004

Analyzed: 12/22/2004 11:14

Compound	Conc.	Conc. mg/Kg		Recovery %		RPD	Ctrl.Lim	nits %	Fla	igs
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Mercury	0.540	0.536	0.500	108.0	107.2	0.7	85-115	20		



### Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439

Received: 12/21/2004 10:10

#### **Batch QC Report**

Prep(s): 7471A Test(s): 7471A

Laboratory Control Spike

Soil

QC Batch # 2004/12/22-04.16

LCS

2004/12/22-04.16-012

Extracted: 12/22/2004

Analyzed: 12/27/2004 06:52

LCSD

.

2004/12/22-04.16-013

Extracted: 12/22/2004

Analyzed: 12/27/2004 06:54

	Compound	Conc.	mg/Kg	Exp.Conc.	Recovery %		RPD	Ctrl.Lim	nits %	Fla	igs
L		LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
	Mercury	0.471	0.471	0.500	94.2	94.2	0.0	85-115	20		



Submission: 2004-12-0731

QC Batch # 2004/12/22-05.16

### Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439 Received: 12/21/2004 10:10

Batch	OC.	Re	port
Duton	w.	110	PVIL

Prep(s): 7470A Test(s): 7470A

**Laboratory Control Spike** Water

LCS 2004/12/22-05.16-105 Extracted: 12/22/2004

Analyzed: 12/27/2004 09:29 LCSD 2004/12/22-05.16-106 Extracted: 12/22/2004 Analyzed: 12/27/2004 09:30

Conc. mg/L Exp.Conc. Recovery % RPD Ctrl.Limits % Flags Compound LCS **LCSD** LCS **LCSD** % Rec. **RPD** LCS LCSD 0.0195 Mercury 0.0193 0.0200 97.5 96.5 1.0 85-115 20



#### Mercury (Hg)

STL Los Angeles

Attn.: Sabina Sudoko

1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439 Received: 12/21/2004 10:10

#### **Legend and Notes**

#### **Result Flag**

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Estimated value, less than reporting limits, but over the method detection limits.

Metals - ICP/MS

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STL Los Angeles

Attn.: Sabina Sudoko 1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439



**STL San Francisco** 1220 Quarry Lane Pleasanton, CA 94566

Tel: (925) 484-1919 Fax: (925) 484-1096 www.stl-inc.com www.chromalab.com

CA DHS ELAP# 2496

#### Samples Reported

Sample Name	Date Sampled	Matrix	Lab#
DP-1-1	12/16/2004 07:19	Soil	1
DP-1-5	12/16/2004 07:53	Soil	2
DP-1-10	12/16/2004 08:00	Soil	3
DP-1-15	12/16/2004 08:05	Soil	4
DP-1-20	12/16/2004 08:12	Soil	5
DP-1-25	12/16/2004 08:27	Soil	6
DP-2-1	12/16/2004 07:47	Soil	7
DP-2-5	12/16/2004 08:37	Soil	8
DP-2-10	12/16/2004 08:42	Soil	9
DP-2-15	12/16/2004 08:52	Soil	10
DP-2-20	12/16/2004 09:03	Soil	11
DP-2-25	12/16/2004 09:14	Soil	12
DP-3-1	12/16/2004 08:06	Soil	13
DP-3-5	12/16/2004 09:40	Soil	14
DP-3-10	12/16/2004 09:45	Soil	15
DP-3-15	12/16/2004 09:51	Soil	16
DP-3-20	12/16/2004 10:02	Soil	17
DP-3-25	12/16/2004 10:09	Soil	18
DP-4-1	12/16/2004 08:19	Soil	19
DP-4-5	12/16/2004 11:41	Soil	20
DP-4-10	12/16/2004 11:46	Soil	21
DP-4-15	12/16/2004 11:50	Soil	22
DP-4-20	12/16/2004 11:58	Soil	23
DP-4-25	12/16/2004 12:12	Soil	24
DP-5-1	12/16/2004 10:23	Soil	25
DP-5-5	12/16/2004 10:59	Soil	26
DP-5-10	12/16/2004 11:04	Soil	27
DP-5-15	12/16/2004 11:11	Soil	28
DP-5-20	12/16/2004 11:19	Soil	29
DP-5-25	12/16/2004 11:29	Soil	30
DP-6-1	12/16/2004 10:31	Soil	31
DP-6-5	12/16/2004 13:20	Soil	32
DP-6-10	12/16/2004 13:27	Soil	33
DP-6-15	12/16/2004 13:39	Soil	34
DP-6-20	12/16/2004 13:45	Soil	35
DP-6-25	12/16/2004 13:54	Soil	36
DP-7-1	12/16/2004 10:35	Soil	37
DP-7-5	12/16/2004 14:02	Soil	38
DP-7-10	12/16/2004 14:02	Soil	39

Metals - ICP/MS

STL Los Angeles

Attn.: Sabina Sudoko 1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

TRENT LABORATORY

**STL San Francisco** 1220 Quarry Lane Pleasanton, CA 94566

Tel: (925) 484-1919 Fax: (925) 484-1096 www.stl-inc.com

Project: E4L170439	004 10:10	www.stl-inc.com		
	Received: 12/21/2	WWW.C[]f	omalab.com	
DP-7-15	12/16/2004 14:08	Soil	40	
DP-7-20	12/16/2004 14:15	Soil CA DHS	ELAP#12496	
DP-7-25	12/16/2004 14:25	Soil	42	
DP-8-1	12/16/2004 10:46	Soil	43	
DP-8-5	12/16/2004 15:35	Soil	44	
DP-8-10	12/16/2004 15:38	Soil	45	
DP-8-15	12/16/2004 15:44	Soil	46	
DP-8-20	12/16/2004 15:53	Soil	47	
DP-8-25	12/16/2004 16:03	Soil	48	
DP-9-1	12/16/2004 10:51	Soil	49	
DP-9-5	12/16/2004 14:51	Soil	50	
DP-9-10	12/16/2004 14:58	Soil	51	
DP-9-15	12/16/2004 15:03	Soil	52	
DP-9-20	12/16/2004 15:08	Soil	53	
DP-9-25	12/16/2004 15:14	Soil	54	
EB-1-121604	12/16/2004 15:25	Water	55	
FB-1-121604	12/16/2004 15:35	Water	56	

Metals - ICP/MS

STL Los Angeles

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Attn.: Sabina Sudoko 1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439

SEVERN TRENT LABORATORY

**STL San Francisco** 1220 Quarry Lane Pleasanton, CA 94566

Tel: (925) 484-1919 Fax: (925) 484-1096 www.stl-inc.com www.chromalab.com

CA DHS ELAP# 2496

Prep(s): 3050B Test(s): 6020

Sample ID: **DP-1-1** Lab ID: 2004-12-0731 - 1
Sampled: 12/16/2004 07:19 Extracted: 12/28/2004 09:52

Matrix: Soil QC Batch#: 2004/12/28-03.67

Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	0.31	0.14	2.0	mg/Kg	10.00	12/30/2004 02:35	<u></u>
Arsenic	5.7	0.42	2.0	mg/Kg	10.00	12/30/2004 02:35	
Barium	94	0.14	1.0	mg/Kg	10.00	12/30/2004 02:35	
Beryllium	0.30	0.16	1.0	mg/Kg	10.00	12/30/2004 02:35	
Cadmium	0.25	0.12	1.0	mg/Kg	10.00	12/30/2004 02:35	
Chromium	28	0.40	2.0	mg/Kg	10.00	12/30/2004 02:35	
Cobalt	8.2	0.13	1.0	mg/Kg	10.00	12/30/2004 02:35	
Copper	17	0.15	2.0	mg/Kg	10.00	12/30/2004 02:35	
Lead	12	0.12	1.0	mg/Kg	10.00	12/30/2004 02:35	
Molybdenum	0.72	0.12	2.0	mg/Kg	10.00	12/30/2004 02:35	
Nickel	14	0.21	2.0	mg/Kg	10.00	12/30/2004 02:35	
Selenium	ND	0.55	2.0	mg/Kg	10.00	12/30/2004 02:35	
Silver	ND	0.15	1.0	mg/Kg	10.00	12/30/2004 02:35	
Thallium	ND	0.15	1.0	mg/Kg	10.00	12/30/2004 02:35	
Vanadium	38	0.67	10	mg/Kg	10.00	12/30/2004 02:35	
Zinc	60	0.55	2.0	mg/Kg	10.00	12/30/2004 02:35	

Metals - ICP/MS

STL Los Angeles

Attn.: Sabina Sudoko 1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439

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SEVERN
TRENT
LABORATORY

**STL San Francisco** 1220 Quarry Lane Pleasanton, CA 94566

Tel: (925) 484-1919 Fax: (925) 484-1096 www.stl-inc.com www.chromalab.com

CA DHS ELAP# 2496

Prep(s): 3050B Test(s): 6020

 Sample ID:
 DP-1-5
 Lab ID:
 2004-12-0731 - 2

 Sampled:
 12/16/2004 07:53
 Extracted:
 12/28/2004 09:52

 Matrix:
 Soil
 QC Batch#:
 2004/12/28-03.67

Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	ND	0.14	2.0	mg/Kg	10.00	12/30/2004 02:38	
Arsenic	ND	0.42	2.0	mg/Kg	10.00	12/30/2004 02:38	
Barium	20	0.14	1.0	mg/Kg	10.00	12/30/2004 02:38	
Beryllium	ND	0.16	1.0	mg/Kg	10.00	12/30/2004 02:38	
Cadmium	ND	0.12	1.0	mg/Kg	10.00	12/30/2004 02:38	
Chromium	8.0	0.40	2.0	mg/Kg	10.00	12/30/2004 02:38	
Cobalt	1.1	0.13	1.0	mg/Kg	10.00	12/30/2004 02:38	
Copper	3.2	0.15	2.0	mg/Kg	10.00	12/30/2004 02:38	
Lead	0.74	0.12	1.0	mg/Kg	10.00	12/30/2004 02:38	J2
Molybdenum	ND	0.12	2.0	mg/Kg	10.00	12/30/2004 02:38	
Nickel	6.7	0.21	2.0	mg/Kg	10.00	12/30/2004 02:38	
Selenium	ND	0.55	2.0	mg/Kg	10.00	12/30/2004 02:38	
Silver	1.1	0.15	1.0	mg/Kg	10.00	12/30/2004 02:38	
Thallium	ND	0.15	1.0	mg/Kg	10.00	12/30/2004 02:38	
Vanadium	4.1	0.67	10	mg/Kg	10.00	12/30/2004 02:38	
Zinc	8.3	0.55	2.0	mg/Kg	10.00	12/30/2004 02:38	

Metals - ICP/MS

STL Los Angeles

Attn.: Sabina Sudoko 1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439

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SEVERN TRENT LABORATORY

**STL San Francisco** 1220 Quarry Lane Pleasanton, CA 94566

Tel: (925) 484-1919 Fax: (925) 484-1096 www.stl-inc.com www.chromalab.com

CA DHS ELAP# 2496

Prep(s): 3050B Test(s): 6020

 Sample ID:
 DP-1-10
 Lab ID:
 2004-12-0731 - 3

 Sampled:
 12/16/2004 08:00
 Extracted:
 12/28/2004 09:52

 Matrix:
 Soil
 QC Batch#:
 2004/12/28-03.67

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Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	ND	0.14	2.0	mg/Kg	10.00	12/30/2004 02:42	
Arsenic	ND	0.42	2.0	mg/Kg	10.00	12/30/2004 02:42	
Barium	33	0.14	1.0	mg/Kg	10.00	12/30/2004 02:42	
Beryllium	ND	0.16	1.0	mg/Kg	10.00	12/30/2004 02:42	
Cadmium	0.54	0.12	1.0	mg/Kg	10.00	12/30/2004 02:42	
Chromium	6.6	0.40	2.0	mg/Kg	10.00	12/30/2004 02:42	
Cobalt	2.0	0.13	1.0	mg/Kg	10.00	12/30/2004 02:42	
Copper	5.0	0.15	2.0	mg/Kg	10.00	12/30/2004 02:42	
Lead	1.1	0.12	1.0	mg/Kg	10.00	12/30/2004 02:42	
Molybdenum	ND	0.12	2.0	mg/Kg	10.00	12/30/2004 02:42	
Nickel	4.5	0.21	2.0	mg/Kg	10.00	12/30/2004 02:42	
Selenium	ND	0.55	2.0	mg/Kg	10.00	12/30/2004 02:42	
Silver	0.23	0.15	1.0	mg/Kg	10.00	12/30/2004 02:42	
Thallium	ND	0.15	1.0	mg/Kg	10.00	12/30/2004 02:42	
Vanadium	6.4	0.67	10	mg/Kg	10.00	12/30/2004 02:42	
Zinc	13	0.55	2.0	mg/Kg	10.00	12/30/2004 02:42	

Metals - ICP/MS

STL Los Angeles

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F.

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Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439

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LABORATORY

STL San Francisco 1220 Quarry Lane Pleasanton, CA 94566

Tel: (925) 484-1919 Fax: (925) 484-1096 www.sti-inc.com www.chromalab.com

CA DHS ELAP# 2496

Prep(s): 3050B Test(s): 6020

 Sample ID:
 DP-1-15
 Lab ID:
 2004-12-0731 - 4

 Sampled:
 12/16/2004 08:05
 Extracted:
 12/28/2004 09:52

 Matrix:
 Soil
 QC Batch#:
 2004/12/28-03.67

Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	ND	0.14	2.0	mg/Kg	10.00	01/03/2005 11:29	<u> </u>
Arsenic	0.35	0.42	2.0	mg/Kg	10.00	01/03/2005 11:29	
Barium	46	0.14	1.0	mg/Kg	10.00	01/03/2005 11:29	
Beryllium	0.11	0.16	1.0	mg/Kg	10.00	01/03/2005 11:29	
Cadmium	0.93	0.12	1.0	mg/Kg	10.00	01/03/2005 11:29	
Chromium	17	0.40	2.0	mg/Kg	10.00	01/03/2005 11:29	
Cobalt	3.3	0.13	1.0	mg/Kg	10.00	01/03/2005 11:29	
Copper	8.0	0.15	2.0	mg/Kg	10.00	01/03/2005 11:29	
Lead	2.6	0.12	1.0	mg/Kg	10.00	01/03/2005 11:29	
Molybdenum	1.9	0.12	2.0	mg/Kg	10.00	01/03/2005 11:29	
Nickel	17	0.21	2.0	mg/Kg	10.00	01/03/2005 11:29	
Selenium	0.56	0.55	2.0	mg/Kg	10.00	01/03/2005 11:29	
Silver	0.66	0.15	1.0	mg/Kg	10.00	01/03/2005 11:29	
Thallium	ND	0.15	1.0	mg/Kg	10.00	01/03/2005 11:29	
Vanadium	11	0.67	10	mg/Kg	10.00	01/03/2005 11:29	
Zinc	29	0.55	2.0	mg/Kg	10.00	01/03/2005 11:29	

Metals - ICP/MS

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Project: E4L170439

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SEVERN TRENT LABORATORY

**STL San Francisco** 1220 Quarry Lane Pleasanton, CA 94566

Tel: (925) 484-1919 Fax: (925) 484-1096 www.stl-inc.com www.chromalab.com

CA DHS ELAP# 2496

Prep(s): 3050B Test(s): 6020

 Sample ID:
 DP-1-20
 Lab ID:
 2004-12-0731 - 5

 Sampled:
 12/16/2004 08:12
 Extracted:
 12/28/2004 09:52

 Matrix:
 Soil
 QC Batch#:
 2004/12/28-03.67

	T_	T	1	T			
Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	ND	0.14	2.0	mg/Kg	10.00	01/03/2005 11:32	
Arsenic	0.29	0.42	2.0	mg/Kg	10.00	01/03/2005 11:32	
Barium	40	0.14	1.0	mg/Kg	10.00	01/03/2005 11:32	
Beryllium	0.11	0.16	1.0	mg/Kg	10.00	01/03/2005 11:32	
Cadmium	0.47	0.12	1.0	mg/Kg	10.00	01/03/2005 11:32	
Chromium	4.2	0.40	2.0	mg/Kg	10.00	01/03/2005 11:32	
Cobalt	2.5	0.13	1.0	mg/Kg	10.00	01/03/2005 11:32	
Copper	6.0	0.15	2.0	mg/Kg	10.00	01/03/2005 11:32	
Lead	1.3	0.12	1.0	mg/Kg	10.00	01/03/2005 11:32	
Molybdenum	0.27	0.12	2.0	mg/Kg	10.00	01/03/2005 11:32	
Nickel	12	0.21	2.0	mg/Kg	10.00	01/03/2005 11:32	
Selenium	0.87	0.55	2.0	mg/Kg	10.00	01/03/2005 11:32	
Silver	0.28	0.15	1.0	mg/Kg	10.00	01/03/2005 11:32	
Thallium	ND	0.15	1.0	mg/Kg	10.00	01/03/2005 11:32	
Vanadium	10	0.67	10	mg/Kg	10.00	01/03/2005 11:32	
Zinc	15	0.55	2.0	mg/Kg	10.00	01/03/2005 11:32	

Metals - ICP/MS

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11/10

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CA DHS ELAP# 2496

Prep(s): 3050B Test(s): 6020

 Sample ID:
 DP-1-25
 Lab ID:
 2004-12-0731 - 6

 Sampled:
 12/16/2004 08:27
 Extracted:
 12/28/2004 09:52

 Matrix:
 Soil
 QC Batch#:
 2004/12/28-03.67

Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	ND	0.14	2.0	mg/Kg	10.00	01/03/2005 11:35	
Arsenic	ND	0.42	2.0	mg/Kg	10.00	01/03/2005 11:35	
Barium	36	0.14	1.0	mg/Kg	10.00	01/03/2005 11:35	
Beryllium	ND	0.16	1.0	mg/Kg	10.00	01/03/2005 11:35	
Cadmium	0.12	0.12	1.0	mg/Kg	10.00	01/03/2005 11:35	
Chromium	4.2	0.40	2.0	mg/Kg	10.00	01/03/2005 11:35	
Cobalt	2.2	0.13	1.0	mg/Kg	10.00	01/03/2005 11:35	
Copper	8.6	0.15	2.0	mg/Kg	10.00	01/03/2005 11:35	
Lead	1.5	0.12	1.0	mg/Kg	10.00	01/03/2005 11:35	
Molybdenum	0.48	0.12	2.0	mg/Kg	10.00	01/03/2005 11:35	
Nickel	4.2	0.21	2.0	mg/Kg	10.00	01/03/2005 11:35	
Selenium	ND	0.55	2.0	mg/Kg	10.00	01/03/2005 11:35	
Silver	0.27	0.15	1.0	mg/Kg	10.00	01/03/2005 11:35	
Thallium	ND	0.15	1.0	mg/Kg	10.00	01/03/2005 11:35	
Vanadium	8.1	0.67	10	mg/Kg	10.00	01/03/2005 11:35	
Zinc	19	0.55	2.0	mg/Kg	10.00	01/03/2005 11:35	

Received: 12/21/2004 10:10

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CA DHS ELAP# 2496

Prep(s): 3050B Test(s): 6020

Sample ID: **DP-2-1** Lab ID: 2004-12-0731 - 7

Received: 12/21/2004 10:10

Sampled: 12/16/2004 07:47 Extracted: 12/28/2004 09:52 Matrix: Soil QC Batch#: 2004/12/28-03.67

Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	ND	0.14	2.0	mg/Kg	10.00	01/03/2005 11:38	
Arsenic	4.6	0.42	2.0	mg/Kg	10.00	01/03/2005 11:38	
Barium	150	0.14	1.0	mg/Kg	10.00	01/03/2005 11:38	
Beryllium	0.42	0.16	1.0	mg/Kg	10.00	01/03/2005 11:38	
Cadmium	0.38	0.12	1.0	mg/Kg	10.00	01/03/2005 11:38	
Chromium	48	0.40	2.0	mg/Kg	10.00	01/03/2005 11:38	
Cobalt	17	0.13	1.0	mg/Kg	10.00	01/03/2005 11:38	
Copper	26	0.15	2.0	mg/Kg	10.00	01/03/2005 11:38	
Lead	12	0.12	1.0	mg/Kg	10.00	01/03/2005 11:38	
Molybdenum	0.58	0.12	2.0	mg/Kg	10.00	01/03/2005 11:38	
Nickel	35	0.21	2.0	mg/Kg	10.00	01/03/2005 11:38	
Selenium	ND	0.55	2.0	mg/Kg	10.00	01/03/2005 11:38	
Silver	ND	0.15	1.0	mg/Kg	10.00	01/03/2005 11:38	
Thallium	ND	0.15	1.0	mg/Kg	10.00	01/03/2005 11:38	
Vanadium	76	0.67	10	mg/Kg	10.00	01/03/2005 11:38	
Zinc	79	0.55	2.0	mg/Kg	10.00	01/03/2005 11:38	

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CA DHS ELAP# 2496

Prep(s): 3050B Test(s): 6020

 Sample ID:
 DP-2-5
 Lab ID:
 2004-12-0731 - 8

 Sampled:
 12/16/2004 08:37
 Extracted:
 12/28/2004 09:52

 Matrix:
 Soil
 QC Batch#:
 2004/12/28-03.67

Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	ND	0.14	2.0	mg/Kg	10.00	01/03/2005 11:41	
Arsenic	ND	0.42	2.0	mg/Kg	10.00	01/03/2005 11:41	
Barium	34	0.14	1.0	mg/Kg	10.00	01/03/2005 11:41	
Beryllium	ND	0.16	1.0	mg/Kg	10.00	01/03/2005 11:41	
Cadmium	ND	0.12	1.0	mg/Kg	10.00	01/03/2005 11:41	
Chromium	2.1	0.40	2.0	mg/Kg	10.00	01/03/2005 11:41	
Cobalt	1.9	0.13	1.0	mg/Kg	10.00	01/03/2005 11:41	·
Copper	3.4	0.15	2.0	mg/Kg	10.00	01/03/2005 11:41	
Lead	1.0	0.12	1.0	mg/Kg	10.00	01/03/2005 11:41	
Molybdenum	ND	0.12	2.0	mg/Kg	10.00	01/03/2005 11:41	
Nickel	2.1	0.21	2.0	mg/Kg	10.00	01/03/2005 11:41	
Selenium	ND	0.55	2.0	mg/Kg	10.00	01/03/2005 11:41	
Silver	ND	0.15	1.0	mg/Kg	10.00	01/03/2005 11:41	
Thallium	ND	0.15	1.0	mg/Kg	10.00	01/03/2005 11:41	
Vanadium	7.9	0.67	10	mg/Kg	10.00	01/03/2005 11:41	
Zinc	12	0.55	2.0	mg/Kg	10.00	01/03/2005 11:41	

Received: 12/21/2004 10:10

Metals - ICP/MS

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Project: E4L170439

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CA DHS ELAP# 2496

Prep(s): 3050B

Sample ID: DP-2-10

12/16/2004 08:42

Matrix: Soil

Sampled:

Test(s): 6020

Lab ID:

2004-12-0731 - 9

Extracted:

Received: 12/21/2004 10:10

12/28/2004 09:52

Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	ND	0.14	2.0	mg/Kg	10.00	01/03/2005 11:44	
Arsenic	ND	0.42	2.0	mg/Kg	10.00	01/03/2005 11:44	
Barium	30	0.14	1.0	mg/Kg	10.00	01/03/2005 11:44	
Beryllium	ND	0.16	1.0	mg/Kg	10.00	01/03/2005 11:44	
Cadmium	ND	0.12	1.0	mg/Kg	10.00	01/03/2005 11:44	
Chromium	3.4	0.40	2.0	mg/Kg	10.00	01/03/2005 11:44	
Cobalt	1.6	0.13	1.0	mg/Kg	10.00	01/03/2005 11:44	
Copper	3.3	0.15	2.0	mg/Kg	10.00	01/03/2005 11:44	
Lead	0.98	0.12	1.0	mg/Kg	10.00	01/03/2005 11:44	J2
Molybdenum	1.1	0.12	2.0	mg/Kg	10.00	01/03/2005 11:44	
Nickel	2.6	0.21	2.0	mg/Kg	10.00	01/03/2005 11:44	
Selenium	0.61	0.55	2.0	mg/Kg	10.00	01/03/2005 11:44	
Silver	ND	0.15	1.0	mg/Kg	10.00	01/03/2005 11:44	
Thallium	ND	0.15	1.0	mg/Kg	10.00	01/03/2005 11:44	
Vanadium	7.2	0.67	10	mg/Kg	10.00	01/03/2005 11:44	
Zinc	11	0.55	2.0	mg/Kg	10.00	01/03/2005 11:44	

Metals - ICP/MS

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Project: E4L170439

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CA DHS ELAP# 2496

Prep(s): 3050B Test(s): 6020

Sample ID: **DP-2-15** Lab ID: 2004-12-0731 - 10 Sampled: 12/16/2004 08:52 Extracted: 12/28/2004 09:52

Received: 12/21/2004 10:10

Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
ND	0.14	2.0	mg/Kg	10.00	01/03/2005 11:47	
ND	0.42	2.0	mg/Kg			
52	0.14	1.0	mg/Kg			
ND	0.16	1.0	mg/Kg			
ND	0.12	1.0	mg/Kg	10.00	01/03/2005 11:47	
5.6	0.40	2.0	mg/Kg		1	
2.5	0.13	1.0	mg/Kg	10.00	01/03/2005 11:47	
6.7	0.15	2.0	mg/Kg	10.00	01/03/2005 11:47	
1.2	0.12	1.0	mg/Kg			
0.60	0.12	2.0	mg/Kg	10.00	01/03/2005 11:47	
5.2	0.21	2.0	mg/Kg	10.00	01/03/2005 11:47	
ND	0.55	2.0	mg/Kg	10.00	01/03/2005 11:47	
ND	0.15	1.0	mg/Kg	1		
ND	0.15	1.0	1 1			
12	0.67	10	1 1			
25	0.55	2.0		1		
	ND ND 52 ND ND 5.6 2.5 6.7 1.2 0.60 5.2 ND ND ND	ND 0.14 ND 0.42 52 0.14 ND 0.16 ND 0.12 5.6 0.40 2.5 0.13 6.7 0.15 1.2 0.12 0.60 0.12 5.2 0.21 ND 0.55 ND 0.15 ND 0.15 ND 0.15 12 0.67	ND         0.14         2.0           ND         0.42         2.0           52         0.14         1.0           ND         0.16         1.0           ND         0.12         1.0           5.6         0.40         2.0           2.5         0.13         1.0           6.7         0.15         2.0           1.2         0.12         1.0           0.60         0.12         2.0           ND         0.55         2.0           ND         0.15         1.0           ND         0.15         1.0           ND         0.15         1.0           12         0.67         10	ND         0.14         2.0         mg/Kg           ND         0.42         2.0         mg/Kg           52         0.14         1.0         mg/Kg           ND         0.16         1.0         mg/Kg           ND         0.12         1.0         mg/Kg           5.6         0.40         2.0         mg/Kg           2.5         0.13         1.0         mg/Kg           6.7         0.15         2.0         mg/Kg           1.2         0.12         1.0         mg/Kg           0.60         0.12         2.0         mg/Kg           ND         0.55         2.0         mg/Kg           ND         0.15         1.0         mg/Kg           ND         0.15         1.0         mg/Kg           ND         0.15         1.0         mg/Kg           ND         0.15         1.0         mg/Kg           12         0.67         10         mg/Kg	ND         0.14         2.0         mg/Kg         10.00           ND         0.42         2.0         mg/Kg         10.00           52         0.14         1.0         mg/Kg         10.00           ND         0.16         1.0         mg/Kg         10.00           ND         0.12         1.0         mg/Kg         10.00           5.6         0.40         2.0         mg/Kg         10.00           2.5         0.13         1.0         mg/Kg         10.00           6.7         0.15         2.0         mg/Kg         10.00           1.2         0.12         1.0         mg/Kg         10.00           0.60         0.12         2.0         mg/Kg         10.00           5.2         0.21         2.0         mg/Kg         10.00           ND         0.55         2.0         mg/Kg         10.00           ND         0.15         1.0         mg/Kg         10.00	ND         0.14         2.0         mg/Kg         10.00         01/03/2005         11:47           ND         0.42         2.0         mg/Kg         10.00         01/03/2005         11:47           52         0.14         1.0         mg/Kg         10.00         01/03/2005         11:47           ND         0.16         1.0         mg/Kg         10.00         01/03/2005         11:47           ND         0.12         1.0         mg/Kg         10.00         01/03/2005         11:47           5.6         0.40         2.0         mg/Kg         10.00         01/03/2005         11:47           2.5         0.13         1.0         mg/Kg         10.00         01/03/2005         11:47           6.7         0.15         2.0         mg/Kg         10.00         01/03/2005         11:47           1.2         0.12         1.0         mg/Kg         10.00         01/03/2005         11:47           1.2         0.12         2.0         mg/Kg         10.00         01/03/2005         11:47           5.2         0.21         2.0         mg/Kg         10.00         01/03/2005         11:47           ND         0.15         1.0

Metals - ICP/MS

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Project: E4L170439

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CA DHS ELAP# 2496

Prep(s): 3050B Test(s): 6020

Sample ID: **DP-2-20** Lab ID: 2004-12-0731 - 11

Received: 12/21/2004 10:10

Sampled: 12/16/2004 09:03 Extracted: 12/28/2004 09:52

Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	ND	0.14	2.0	mg/Kg	10.00	01/03/2005 11:50	
Arsenic	ND	0.42	2.0	mg/Kg	10.00	01/03/2005 11:50	
Barium	32	0.14	1.0	mg/Kg	10.00	01/03/2005 11:50	
Beryllium	ND	0.16	1.0	mg/Kg	10.00	01/03/2005 11:50	
Cadmium	0.22	0.12	1.0	mg/Kg	10.00	01/03/2005 11:50	
Chromium	5.5	0.40	2.0	mg/Kg	10.00	01/03/2005 11:50	
Cobalt	2.0	0.13	1.0	mg/Kg	10.00	01/03/2005 11:50	
Copper	4.8	0.15	2.0	mg/Kg	10.00	01/03/2005 11:50	
Lead	1.2	0.12	1.0	mg/Kg	10.00	01/03/2005 11:50	
Molybdenum	0.80	0.12	2.0	mg/Kg	10.00	01/03/2005 11:50	
Nickel	6.0	0.21	2.0	mg/Kg	10.00	01/03/2005 11:50	
Selenium	0.31	0.55	2.0	mg/Kg	10.00	01/03/2005 11:50	
Silver	ND	0.15	1.0	mg/Kg	10.00	01/03/2005 11:50	
Thallium	ND	0.15	1.0	mg/Kg	10.00	01/03/2005 11:50	
Vanadium	7.5	0.67	10	mg/Kg	10.00	01/03/2005 11:50	
Zinc	12	0.55	2.0	mg/Kg	10.00	01/03/2005 11:50	

Metals - ICP/MS

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Project: E4L170439

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Tel: (925) 484-1919 Fax: (925) 484-1096 www.stl-inc.com www.chromalab.com

CA DHS ELAP# 2496

Prep(s): 3050B Test(s): 6020

Sample ID: **DP-2-25** Lab ID: 2004-12-0731 - 12

Sampled: 12/16/2004 09:14 Extracted: 12/28/2004 09:52

Received: 12/21/2004 10:10

Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	ND	0.14	2.0	mg/Kg	10.00	01/03/2005 11:53	
Arsenic	ND	0.42	2.0	mg/Kg	10.00	01/03/2005 11:53	
Barium	38	0.14	1.0	mg/Kg	10.00	01/03/2005 11:53	
Beryllium	ND	0.16	1.0	mg/Kg	10.00	01/03/2005 11:53	
Cadmium	ND	0.12	1.0	mg/Kg	10.00	01/03/2005 11:53	
Chromium	3.2	0.40	2.0	mg/Kg	10.00	01/03/2005 11:53	
Cobalt	1.9	0.13	1.0	mg/Kg	10.00	01/03/2005 11:53	
Copper	3.9	0.15	2.0	mg/Kg	10.00	01/03/2005 11:53	
Lead	0.91	0.12	1.0	mg/Kg	10.00	01/03/2005 11:53	
Molybdenum	ND	0.12	2.0	mg/Kg	10.00	01/03/2005 11:53	
Nickel	2.8	0.21	2.0	mg/Kg	10.00	01/03/2005 11:53	
Selenium	1.8	0.55	2.0	mg/Kg	10.00	01/03/2005 11:53	
Silver	ND	0.15	1.0	mg/Kg	10.00	01/03/2005 11:53	
Thallium	ND	0.15	1.0	mg/Kg	10.00	01/03/2005 11:53	
Vanadium	7.8	0.67	10	mg/Kg	10.00	01/03/2005 11:53	
Zinc	12	0.55	2.0	mg/Kg	10.00	01/03/2005 11:53	

Metals - ICP/MS

STL Los Angeles

Attn.: Sabina Sudoko 1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

12/16/2004 08:06

Project: E4L170439

Sampled:

SEVERN TRENT LABORATORY

**STL San Francisco** 1220 Quarry Lane Pleasanton, CA 94566

Tel: (925) 484-1919 Fax: (925) 484-1096 www.stl-inc.com www.chromalab.com

CA DHS ELAP# 2496

Prep(s): 3050B Test(s): 6020

Sample ID: **DP-3-1** Lab ID: 2004-12-0731 - 13

Received: 12/21/2004 10:10

Extracted:

12/28/2004 09:52

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Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	0.31	0.14	2.0	mg/Kg	10.00	01/03/2005 11:56	
Arsenic	ND	0.42	2.0	mg/Kg	10.00	01/03/2005 11:56	
Barium	83	0.14	1.0	mg/Kg	10.00	01/03/2005 11:56	
Beryllium	0.25	0.16	1.0	mg/Kg	10.00	01/03/2005 11:56	
Cadmium	1.8	0.12	1.0	mg/Kg	10.00	01/03/2005 11:56	
Chromium	23	0.40	2.0	mg/Kg	10.00	01/03/2005 11:56	
Cobalt	8.9	0.13	1.0	mg/Kg	10.00	01/03/2005 11:56	
Copper	14	0.15	2.0	mg/Kg	10.00	01/03/2005 11:56	
Lead	7.2	0.12	1.0	mg/Kg	10.00	01/03/2005 11:56	
Molybdenum	1.1	0.12	2.0	mg/Kg	10.00	01/03/2005 11:56	
Nickel	17	0.21	2.0	mg/Kg	10.00	01/03/2005 11:56	
Selenium	ND	0.55	2.0	mg/Kg	10.00	01/03/2005 11:56	
Silver	ND	0.15	1.0	mg/Kg	10.00	01/03/2005 11:56	
Thallium	ND	0.15	1.0	mg/Kg	10.00	01/03/2005 11:56	
Vanadium	36	0.67	10	mg/Kg	10.00	01/03/2005 11:56	
Zinc	45	0.55	2.0	mg/Kg	10.00	01/03/2005 11:56	

Metals - ICP/MS

STL Los Angeles

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Attn.: Sabina Sudoko 1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439

Sampled:

SEVERN TRENT **LABORATORY** 

STL San Francisco 1220 Quarry Lane Pleasanton, CA 94566

Tel: (925) 484-1919 Fax: (925) 484-1096 www.stl-inc.com www.chromalab.com

CA DHS ELAP# 2496

Prep(s): 3050B Test(s): 6020

Sample ID: DP-3-5 Lab ID: 2004-12-0731 - 14

Received: 12/21/2004 10:10

12/16/2004 09:40 Extracted: 12/28/2004 10:05 Matrix: Soil QC Batch#: 2004/12/28-05.67

Compound Conc. MDL RL Unit Dilution Analyzed Flag **Antimony** 10.00 12/30/2004 17:50 ND 0.14 2.0 mg/Kg Arsenic ND 0.42 2.0 10.00 12/30/2004 17:50 mg/Kg Barium 50 0.14 1.0 10.00 12/30/2004 17:50 mg/Kg Beryllium 10.00 12/30/2004 17:50 ND 0.16 1.0 mg/Kg Cadmium ND 0.12 1.0 mg/Kg 10.00 12/30/2004 17:50 Chromium 3.9 2.0 0.40 10.00 12/30/2004 17:50 mg/Kg Cobalt 2.9 10.00 12/30/2004 17:50 0.13 1.0 mg/Kg Copper 5.7 0.15 2.0 mg/Kg 10.00 12/30/2004 17:50 Lead 1.2 0.12 1.0 mg/Kg 10.00 12/30/2004 17:50 Molybdenum 0.38 2.0 0.12 mg/Kg 10.00 12/30/2004 17:50 Nickel 4.1 0.21 2.0 10.00 12/30/2004 17:50 mg/Kg Selenium ND 0.55 2.0 10.00 12/30/2004 17:50 mg/Kg Silver ND 0.15 1.0 mg/Kg 10.00 12/30/2004 17:50 Thallium ND 1.0 10.00 12/30/2004 17:50 0.15 mg/Kg Vanadium 12 0.67 10.00 12/30/2004 17:50 10 mg/Kg Zinc 19 0.55 2.0 mg/Kg 10.00 12/30/2004 17:50

Metals - ICP/MS

STL Los Angeles

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Attn.: Sabina Sudoko 1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439

SEVERN TRENT LABORATORY

STL San Francisco 1220 Quarry Lane Pleasanton, CA 94566

Tel: (925) 484-1919 Fax: (925) 484-1096 www.stl-inc.com www.chromalab.com

CA DHS ELAP# 2496

Prep(s): 3050B Test(s): 6020

Sample ID: **DP-3-10** Lab ID: 2004-12-0731 - 15 Sampled: 12/16/2004 09:45 Extracted: 12/28/2004 10:05

Received: 12/21/2004 10:10

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Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	ND	0.14	2.0	mg/Kg	10.00	12/30/2004 18:32	
Arsenic	1.2	0.42	2.0	mg/Kg	10.00	12/30/2004 18:32	
Barium	69	0.14	1.0	mg/Kg	10.00	12/30/2004 18:32	
Beryllium	0.14	0.16	1.0	mg/Kg	10.00	12/30/2004 18:32	
Cadmium	ND	0.12	1.0	mg/Kg	10.00	12/30/2004 18:32	
Chromium	66	0.40	2.0	mg/Kg	10.00	12/30/2004 18:32	
Cobalt	3.7	0.13	1.0	mg/Kg	10.00	12/30/2004 18:32	
Copper	7.7	0.15	2.0	mg/Kg	10.00	12/30/2004 18:32	
Lead	2.1	0.12	1.0	mg/Kg	10.00	12/30/2004 18:32	
Molybdenum	0.86	0.12	2.0	mg/Kg	10.00	12/30/2004 18:32	
Nickel	61	0.21	2.0	mg/Kg	10.00	12/30/2004 18:32	
Selenium	ND	0.55	2.0	mg/Kg	10.00	12/30/2004 18:32	
Silver	ND	0.15	1.0	mg/Kg	10.00	12/30/2004 18:32	
Thallium	ND	0.15	1.0	mg/Kg	10.00	12/30/2004 18:32	
Vanadium	14	0.67	10	mg/Kg	10.00	12/30/2004 18:32	
Zinc	27	0.55	2.0	mg/Kg	10.00	12/30/2004 18:32	

Metals - ICP/MS

STL Los Angeles

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Attn.: Sabina Sudoko 1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439

SEVERN TRENT LABORATORY

STL San Francisco 1220 Quarry Lane Pleasanton, CA 94566

Tel: (925) 484-1919 Fax: (925) 484-1096 www.stl-inc.com www.chromalab.com

CA DHS ELAP# 2496

Prep(s): 3050B Test(s): 6020

 Sample ID:
 DP-3-15
 Lab ID:
 2004-12-0731 - 16

 Sampled:
 12/16/2004 09:51
 Extracted:
 12/28/2004 10:05

Received: 12/21/2004 10:10

Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	ND	0.14	2.0	mg/Kg	10.00	12/30/2004 18:35	· · · · · · · · · · · · · · · · · · ·
Arsenic	0.66	0.42	2.0	mg/Kg		12/30/2004 18:35	
Barium	40	0.14	1.0	mg/Kg	10.00	12/30/2004 18:35	
Beryllium	0.10	0.16	1.0	mg/Kg	10.00	12/30/2004 18:35	
Cadmium	ND	0.12	1.0	mg/Kg	10.00	12/30/2004 18:35	
Chromium	11	0.40	2.0	mg/Kg	10.00	12/30/2004 18:35	
Cobalt	2.7	0.13	1.0	mg/Kg	10.00	12/30/2004 18:35	
Copper	7.4	0.15	2.0	mg/Kg	10.00	12/30/2004 18:35	
Lead	1.4	0.12	1.0	mg/Kg	10.00	12/30/2004 18:35	
Molybdenum	0.43	0.12	2.0	mg/Kg	10.00	12/30/2004 18:35	
Nickel	5.6	0.21	2.0	mg/Kg	10.00	12/30/2004 18:35	
Selenium	ND	0.55	2.0	mg/Kg	10.00	12/30/2004 18:35	
Silver	ND	0.15	1.0	mg/Kg	10.00	12/30/2004 18:35	
Thallium	ND	0.15	1.0	mg/Kg	10.00	12/30/2004 18:35	
Vanadium	11	0.67	10	mg/Kg	10.00	12/30/2004 18:35	
Zinc	17	0.55	2.0	mg/Kg	10.00	12/30/2004 18:35	

Metals - ICP/MS

STL Los Angeles

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Attn.: Sabina Sudoko 1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439

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CA DHS ELAP# 2496

Prep(s): 3050B

Sample ID: DP-3-20

Sampled: 12/16/2004 10:02

Matrix: Soil

Test(s): 6020

Lab ID: Extracted:

Received: 12/21/2004 10:10

): 2004**-**12-0731 - 17

12/28/2004 10:05

Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	ND	0.14	2.0	mg/Kg	10.00	12/30/2004 18:39	
Arsenic	0.95	0.42	2.0	mg/Kg	10.00	12/30/2004 18:39	
Barium	34	0.14	1.0	mg/Kg	10.00	12/30/2004 18:39	
Beryllium	ND	0.16	1.0	mg/Kg	10.00	12/30/2004 18:39	
Cadmium	ND	0.12	1.0	mg/Kg	10.00	12/30/2004 18:39	
Chromium	9.5	0.40	2.0	mg/Kg	10.00	12/30/2004 18:39	
Cobalt	2.0	0.13	1.0	mg/Kg	10.00	12/30/2004 18:39	
Copper	5.9	0.15	2.0	mg/Kg	10.00	12/30/2004 18:39	
Lead	1.3	0.12	1.0	mg/Kg	10.00	12/30/2004 18:39	
Molybdenum	1.1	0.12	2.0	mg/Kg	10.00	12/30/2004 18:39	
Nickel	6.5	0.21	2.0	mg/Kg	10.00	12/30/2004 18:39	
Selenium	ND	0.55	2.0	mg/Kg	10.00	12/30/2004 18:39	
Silver	ND	0.15	1.0	mg/Kg	10.00	12/30/2004 18:39	
Thallium	ND	0.15	1.0	mg/Kg	10.00	12/30/2004 18:39	
Vanadium	8.4	0.67	10	mg/Kg	10.00	12/30/2004 18:39	
Zinc	14	0.55	2.0	mg/Kg	10.00	12/30/2004 18:39	

Metals - ICP/MS

STL Los Angeles

.

Attn.: Sabina Sudoko 1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439

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Tel: (925) 484-1919 Fax: (925) 484-1096 www.stl-inc.com www.chromalab.com

CA DHS ELAP# 2496

Prep(s): 3050B

Sample ID: DP-3-25

Sampled: 12/16/2004 10:09

Matrix: Soil Test(s): 6020

Received: 12/21/2004 10:10

Lab ID:

Extracted:

2004-12-0731 - 18

12/28/2004 10:05

Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	ND	0.14	2.0	mg/Kg	10.00	12/30/2004 18:43	<u></u>
Arsenic	0.48	0.42	2.0	mg/Kg	10.00	12/30/2004 18:43	
Barium	29	0.14	1.0	mg/Kg	10.00	12/30/2004 18:43	
Beryllium	ND	0.16	1.0	mg/Kg	10.00	12/30/2004 18:43	
Cadmium	ND	0.12	1.0	mg/Kg	10.00	12/30/2004 18:43	
Chromium	11	0.40	2.0	mg/Kg	10.00	12/30/2004 18:43	
Cobalt	1.6	0.13	1.0	mg/Kg	10.00	12/30/2004 18:43	
Copper	3.7	0.15	2.0	mg/Kg	10.00	12/30/2004 18:43	
Lead	0.95	0.12	1.0	mg/Kg	10.00	12/30/2004 18:43	J2
Molybdenum	0.32	0.12	2.0	mg/Kg	10.00	12/30/2004 18:43	
Nickel	5.6	0.21	2.0	mg/Kg	10.00	12/30/2004 18:43	
Selenium	ND	0.55	2.0	mg/Kg	10.00	12/30/2004 18:43	
Silver	ND	0.15	1.0	mg/Kg	10.00	12/30/2004 18:43	
Thallium	ND	0.15	1.0	mg/Kg	10.00	12/30/2004 18:43	
Vanadium	6.8	0.67	10	mg/Kg	10.00	12/30/2004 18:43	
Zinc	11	0.55	2.0	mg/Kg	10.00	12/30/2004 18:43	

Metals - ICP/MS

STL Los Angeles

Attn.: Sabina Sudoko 1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Sampled: 12/16/2004 08:19

Project: E4L170439

SEVERN TRENT LABORATORY

**STL San Francisco** 1220 Quarry Lane Pleasanton, CA 94566

Tel: (925) 484-1919 Fax: (925) 484-1096 www.stl-inc.com www.chromalab.com

CA DHS ELAP# 2496

Prep(s): 3050B Test(s): 6020

Sample ID: **DP-4-1** Lab ID: 2004-12-0731 - 19

Received: 12/21/2004 10:10

Extracted:

12/28/2004 10:05

Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
0.20	0.14	2.0	mg/Kg	10.00	12/30/2004 18:46	
2.4	0.42	2.0	mg/Kg	10.00	12/30/2004 18:46	
120	0.14	1.0	mg/Kg	10.00	12/30/2004 18:46	
0.32	0.16	1.0	mg/Kg	10.00	12/30/2004 18:46	
0.71	0.12	1.0	mg/Kg	10.00	12/30/2004 18:46	
180	0.40	2.0	mg/Kg	10.00	12/30/2004 18:46	
8.5	0.13	1.0	mg/Kg	10.00	12/30/2004 18:46	
14	0.15	2.0	mg/Kg	10.00	12/30/2004 18:46	
21	0.12	1.0	mg/Kg	10.00	12/30/2004 18:46	
0.96	0.12	2.0	mg/Kg	10.00	12/30/2004 18:46	
15	0.21	2.0	mg/Kg	10.00	12/30/2004 18:46	
ND	0.55	2.0	mg/Kg	10.00	12/30/2004 18:46	
ND	0.15	1.0	mg/Kg	10.00	12/30/2004 18:46	
ND	0.15	1.0	mg/Kg	10.00	12/30/2004 18:46	
30	0.67	10	mg/Kg	10.00	12/30/2004 18:46	
60	0.55	2.0	mg/Kg	10.00	12/30/2004 18:46	
	0.20 2.4 120 0.32 0.71 180 8.5 14 21 0.96 15 ND ND ND 30	0.20	0.20       0.14       2.0         2.4       0.42       2.0         120       0.14       1.0         0.32       0.16       1.0         0.71       0.12       1.0         180       0.40       2.0         8.5       0.13       1.0         14       0.15       2.0         21       0.12       1.0         0.96       0.12       2.0         15       0.21       2.0         ND       0.55       2.0         ND       0.15       1.0         ND       0.15       1.0         ND       0.67       10	0.20         0.14         2.0         mg/Kg           2.4         0.42         2.0         mg/Kg           120         0.14         1.0         mg/Kg           0.32         0.16         1.0         mg/Kg           0.71         0.12         1.0         mg/Kg           180         0.40         2.0         mg/Kg           8.5         0.13         1.0         mg/Kg           14         0.15         2.0         mg/Kg           21         0.12         1.0         mg/Kg           0.96         0.12         2.0         mg/Kg           ND         0.55         2.0         mg/Kg           ND         0.15         1.0         mg/Kg           ND         0.15         1.0         mg/Kg           ND         0.15         1.0         mg/Kg           ND         0.67         10         mg/Kg	0.20         0.14         2.0         mg/Kg         10.00           2.4         0.42         2.0         mg/Kg         10.00           120         0.14         1.0         mg/Kg         10.00           0.32         0.16         1.0         mg/Kg         10.00           0.71         0.12         1.0         mg/Kg         10.00           180         0.40         2.0         mg/Kg         10.00           8.5         0.13         1.0         mg/Kg         10.00           14         0.15         2.0         mg/Kg         10.00           21         0.12         1.0         mg/Kg         10.00           0.96         0.12         2.0         mg/Kg         10.00           ND         0.55         2.0         mg/Kg         10.00           ND         0.15         1.0         mg/Kg         10.00           ND         0.15         1.0         mg/Kg         10.00           ND         0.15         1.0         mg/Kg         10.00           ND         0.67         10         mg/Kg         10.00	0.20         0.14         2.0         mg/Kg         10.00         12/30/2004         18:46           2.4         0.42         2.0         mg/Kg         10.00         12/30/2004         18:46           120         0.14         1.0         mg/Kg         10.00         12/30/2004         18:46           0.32         0.16         1.0         mg/Kg         10.00         12/30/2004         18:46           0.71         0.12         1.0         mg/Kg         10.00         12/30/2004         18:46           180         0.40         2.0         mg/Kg         10.00         12/30/2004         18:46           8.5         0.13         1.0         mg/Kg         10.00         12/30/2004         18:46           14         0.15         2.0         mg/Kg         10.00         12/30/2004         18:46           21         0.12         1.0         mg/Kg         10.00         12/30/2004         18:46           0.96         0.12         2.0         mg/Kg         10.00         12/30/2004         18:46           ND         0.55         2.0         mg/Kg         10.00         12/30/2004         18:46           ND         0.15

Metals - ICP/MS

STL Los Angeles

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Attn.: Sabina Sudoko 1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439

SEVERN TRENT LABORATORY

STL San Francisco 1220 Quarry Lane Pleasanton, CA 94566

Tel: (925) 484-1919 Fax: (925) 484-1096 www.stl-inc.com www.chromalab.com

CA DHS ELAP# 2496

Prep(s): 3050B Test(s): 6020

Sample ID: DP-4-5 Lab ID: 2004-12-0731 - 20 Sampled: 12/16/2004 11:41

Received: 12/21/2004 10:10

Extracted:

12/28/2004 10:05

Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	ND	0.14	2.0	mg/Kg	10.00	12/30/2004 18:50	
Arsenic	0.59	0.42	2.0	mg/Kg	10.00	12/30/2004 18:50	
Barium	37	0.14	1.0	mg/Kg	10.00	12/30/2004 18:50	
Beryllium	ND	0.16	1.0	mg/Kg	10.00	12/30/2004 18:50	
Cadmium	ND	0.12	1.0	mg/Kg	10.00	12/30/2004 18:50	
Chromium	3.0	0.40	2.0	mg/Kg	10.00	12/30/2004 18:50	
Cobalt	2.1	0.13	1.0	mg/Kg	10.00	12/30/2004 18:50	
Copper	3.9	0.15	2.0	mg/Kg	10.00	12/30/2004 18:50	
Lead	0.88	0.12	1.0	mg/Kg	10.00	12/30/2004 18:50	
Molybdenum	ND	0.12	2.0	mg/Kg	10.00	12/30/2004 18:50	
Nickel	2.6	0.21	2.0	mg/Kg	10.00	12/30/2004 18:50	
Selenium	ND	0.55	2.0	mg/Kg	10.00	12/30/2004 18:50	
Silver	ND	0.15	1.0	mg/Kg	10.00	12/30/2004 18:50	
Thallium	ND	0.15	1.0	mg/Kg	10.00	12/30/2004 18:50	
Vanadium	9.0	0.67	10	mg/Kg	10.00	12/30/2004 18:50	
Zinc	14	0.55	2.0	mg/Kg	10.00	12/30/2004 18:50	

Metals - ICP/MS

STL Los Angeles

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Project: E4L170439

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Tel: (925) 484-1919 Fax: (925) 484-1096 www.stl-inc.com www.chromalab.com

CA DHS ELAP# 2496

Prep(s): 3050B

Sample ID: DP-4-10

DI -7-10

Sampled: 12/16/2004 11:46

Matrix: Soil

Test(s): 6020

Lab ID:

Received: 12/21/2004 10:10

2004-12-0731 - 21

Extracted: 12/28/2004 10:05

Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	ND	0.14	2.0	mg/Kg	10.00	12/30/2004 18:54	
Arsenic	0.69	0.42	2.0	mg/Kg	10.00	12/30/2004 18:54	
Barium	40	0.14	1.0	mg/Kg	10.00	12/30/2004 18:54	
Beryllium	0.11	0.16	1.0	mg/Kg	10.00	12/30/2004 18:54	
Cadmium	0.63	0.12	1.0	mg/Kg	10.00	12/30/2004 18:54	
Chromium	4.4	0.40	2.0	mg/Kg	10.00	12/30/2004 18:54	
Cobalt	2.4	0.13	1.0	mg/Kg	10.00	12/30/2004 18:54	
Copper	4.9	0.15	2.0	mg/Kg	10.00	12/30/2004 18:54	
Lead	2.6	0.12	1.0	mg/Kg	10.00	12/30/2004 18:54	
Molybdenum	0.41	0.12	2.0	mg/Kg	10.00	12/30/2004 18:54	
Nickel	4.3	0.21	2.0	mg/Kg	10.00	12/30/2004 18:54	
Selenium	ND	0.55	2.0	mg/Kg	10.00	12/30/2004 18:54	
Silver	ND	0.15	1.0	mg/Kg	10.00	12/30/2004 18:54	
Thallium	ND	0.15	1.0	mg/Kg	10.00	12/30/2004 18:54	
Vanadium	9.8	0.67	10	mg/Kg	10.00	12/30/2004 18:54	
Zinc	17	0.55	2.0	mg/Kg	10.00	12/30/2004 18:54	

Metals - ICP/MS

STL Los Angeles

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Project: E4L170439

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CA DHS ELAP# 2496

Prep(s): 3050B

Sample ID: DP-4-15

12/16/2004 11:50

Sampled: Matrix:

Soil

Test(s): 6020

Received: 12/21/2004 10:10

Lab ID:

Extracted:

2004-12-0731 - 22

12/28/2004 10:05

Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	ND	0.14	2.0	mg/Kg	10.00	12/30/2004 18:57	
Arsenic	0.86	0.42	2.0	mg/Kg	10.00	12/30/2004 18:57	
Barium	43	0.14	1.0	mg/Kg	10.00	12/30/2004 18:57	
Beryllium	ND	0.16	1.0	mg/Kg	10.00	12/30/2004 18:57	
Cadmium	ND	0.12	1.0	mg/Kg	10.00	12/30/2004 18:57	
Chromium	7.5	0.40	2.0	mg/Kg	10.00	12/30/2004 18:57	
Cobalt	2.3	0.13	1.0	mg/Kg	10.00	12/30/2004 18:57	
Copper	6.1	0.15	2.0	mg/Kg	10.00	12/30/2004 18:57	
Lead	1.4	0.12	1.0	mg/Kg	10.00	12/30/2004 18:57	
Molybdenum	0.76	0.12	2.0	mg/Kg	10.00	12/30/2004 18:57	
Nickel	5.8	0.21	2.0	mg/Kg	10.00	12/30/2004 18:57	
Selenium	ND	0.55	2.0	mg/Kg	10.00	12/30/2004 18:57	
Silver	ND	0.15	1.0	mg/Kg	10.00	12/30/2004 18:57	
Thallium	ND	0.15	1.0	mg/Kg	10.00	12/30/2004 18:57	
Vanadium	9.4	0.67	10	mg/Kg	10.00	12/30/2004 18:57	
Zinc	17	0.55	2.0	mg/Kg	10.00	12/30/2004 18:57	

Metals - ICP/MS

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CA DHS ELAP# 2496

Prep(s): 3050B

Sample ID: DP-4-20

Sampled: 12/16/2004 11:58

Matrix:

Soil

Test(s): 6020

Lab ID:

Extracted:

Received: 12/21/2004 10:10

2004-12-0731 - 23

12/28/2004 10:05

Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	ND	0.14	2.0	mg/Kg	10.00	12/30/2004 19:17	
Arsenic	0.55	0.42	2.0	mg/Kg		12/30/2004 19:17	
Barium	36	0.14	1.0	mg/Kg		12/30/2004 19:17	
Beryllium	0.14	0.16	1.0	mg/Kg	10.00	12/30/2004 19:17	
Cadmium	0.16	0.12	1.0	mg/Kg	10.00	12/30/2004 19:17	
Chromium	14	0.40	2.0	mg/Kg	10.00	12/30/2004 19:17	
Cobalt	1.9	0.13	1.0	mg/Kg	10.00	12/30/2004 19:17	
Copper	4.8	0.15	2.0	mg/Kg	10.00	12/30/2004 19:17	
Lead	1.0	0.12	1.0	mg/Kg	10.00	12/30/2004 19:17	
Molybdenum	0.57	0.12	2.0	mg/Kg	10.00	12/30/2004 19:17	
Nickel	8.8	0.21	2.0	mg/Kg	10.00	12/30/2004 19:17	
Selenium	ND	0.55	2.0	mg/Kg	10.00	12/30/2004 19:17	
Silver	ND	0.15	1.0	mg/Kg	10.00	12/30/2004 19:17	
Thallium	ND	0.15	1.0	mg/Kg	10.00	12/30/2004 19:17	
Vanadium	7.7	0.67	10	mg/Kg	10.00	12/30/2004 19:17	
Zinc	15	0.55	2.0	mg/Kg	10.00	12/30/2004 19:17	

Metals - ICP/MS

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CA DHS ELAP# 2496

Prep(s): 3050B

Sample ID: DP-4-25

Sampled: 12/16/2004 12:12

Matrix: 5

Test(s): 6020

Lab ID:

Received: 12/21/2004 10:10

2004-12-0731 - 24

Extracted:

12/28/2004 10:05

Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	ND	0.14	2.0	mg/Kg	10.00	12/30/2004 19:21	<u> </u>
Arsenic	0.84	0.42	2.0	mg/Kg	10.00	12/30/2004 19:21	
Bariu <b>m</b>	45	0.14	1.0	mg/Kg	10.00	12/30/2004 19:21	
Beryllium	0.10	0.16	1.0	mg/Kg	10.00	12/30/2004 19:21	
Cadmium	ND	0.12	1.0	mg/Kg	10.00	12/30/2004 19:21	
Chromium	6.2	0.40	2.0	mg/Kg	10.00	12/30/2004 19:21	
Cobalt	2.2	0.13	1.0	mg/Kg	10.00	12/30/2004 19:21	
Copper	6.3	0.15	2.0	mg/Kg	10.00	12/30/2004 19:21	
Lead	1.1	0.12	1.0	mg/Kg	10.00	12/30/2004 19:21	
Molybdenum	1.2	0.12	2.0	mg/Kg	10.00	12/30/2004 19:21	
Nickel	4.7	0.21	2.0	mg/Kg	10.00	12/30/2004 19:21	
Selenium	ND	0.55	2.0	mg/Kg	10.00	12/30/2004 19:21	
Silver	ND	0.15	1.0	mg/Kg		12/30/2004 19:21	
Thallium	ND	0.15	1.0	mg/Kg	10.00	12/30/2004 19:21	
Vanadium	8.8	0.67	10	mg/Kg		12/30/2004 19:21	
Zinc	17	0.55	2.0	mg/Kg		12/30/2004 19:21	

Metals - ICP/MS

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CA DHS ELAP# 2496

Prep(s): 3050B Test(s):

Sample ID: DP-5-1 Lab ID: 2004-12-0731 - 25

Sampled: 12/16/2004 10:23 Extracted: 12/28/2004 10:05 Matrix:

Received: 12/21/2004 10:10

6020

QC Batch#: 2004/12/28-05.67

Compound Conc. MDL RL Unit Dilution Analyzed Flag Antimony 0.24 0.14 2.0 10.00 12/30/2004 19:24 mg/Kg Arsenic 10 2.0 0.42 mg/Kg 10.00 12/30/2004 19:24 Barium 110 0.14 1.0 10.00 12/30/2004 19:24 mg/Kg Beryllium 0.33 0.16 1.0 10.00 12/30/2004 19:24 mg/Kg Cadmium 0.48 0.12 1.0 mg/Kg 10.00 12/30/2004 19:24 Chromium 23 10.00 12/30/2004 19:24 0.40 2.0 mg/Kg Cobalt 9.8 0.13 1.0 mg/Kg 10.00 12/30/2004 19:24 Copper 18 0.15 2.0 10.00 12/30/2004 19:24 mg/Kg Lead 13 0.12 1.0 mg/Kg 10.00 12/30/2004 19:24 Molybdenum 0.96 2.0 0.12 mg/Kg 10.00 12/30/2004 19:24 Nickel 2.0 17 0.21 mg/Kg 10.00 12/30/2004 19:24 Selenium ND 2.0 10.00 12/30/2004 19:24 0.55 mg/Kg Silver 0.18 0.15 1.0 10.00 12/30/2004 19:24 mg/Kg Thallium ND 0.15 1.0 mg/Kg 10.00 12/30/2004 19:24 Vanadium 37 0.67 10 10.00 12/30/2004 19:24 mg/Kg Zinc 64 0.55 2.0 mg/Kg 10.00 12/30/2004 19:24

Metals - ICP/MS

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CA DHS ELAP# 2496

Prep(s): 3050B Test(s): 6020

 Sample ID: DP-5-5
 Lab ID: 2004-12-0731 - 26

 Sampled: 12/16/2004 10:59
 Extracted: 12/28/2004 10:05

Received: 12/21/2004 10:10

Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	ND	0.14	2.0	mg/Kg	10.00	12/30/2004 19:28	
Arsenic	0.77	0.42	2.0	mg/Kg		12/30/2004 19:28	
Barium	39	0.14	1.0	mg/Kg		12/30/2004 19:28	
Beryllium	ND	0.16	1.0	mg/Kg		12/30/2004 19:28	
Cadmium	ND	0.12	1.0	mg/Kg		12/30/2004 19:28	
Chromium	3.5	0.40	2.0	mg/Kg		12/30/2004 19:28	
Cobalt	2.0	0.13	1.0	mg/Kg		12/30/2004 19:28	
Copper	4.4	0.15	2.0	mg/Kg		12/30/2004 19:28	
Lead	1.2	0.12	1.0	mg/Kg		12/30/2004 19:28	
Molybdenum	0.48	0.12	2.0	mg/Kg		12/30/2004 19:28	
Nickel	3.7	0.21	2.0	mg/Kg		12/30/2004 19:28	
Selenium	ND	0.55	2.0	mg/Kg		12/30/2004 19:28	
Silver	ND	0.15	1.0	mg/Kg		12/30/2004 19:28	
Thallium	ND	0.15	1.0	mg/Kg		12/30/2004 19:28	
Vanadium	8.4	0.67	10	mg/Kg	10.00	1	
Zinc	15	0.55	2.0	mg/Kg	10.00		

Metals - ICP/MS

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CA DHS ELAP# 2496

Prep(s): 3050B

Sample ID: DP-5-10

Sampled: 12/16/2004 11:04

Matrix: Soil

Test(s): 6020

Lab ID: 200

2004-12-0731 - 27

Extracted:

Received: 12/21/2004 10:10

12/28/2004 10:05

Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	ND	0.14	2.0	mg/Kg	10.00	12/30/2004 19:32	<u> </u>
Arsenic	1.4	0.42	2.0	mg/Kg		12/30/2004 19:32	
Barium	96	0.14	1.0	mg/Kg		12/30/2004 19:32	
Beryllium	0.24	0.16	1.0	mg/Kg		12/30/2004 19:32	
Cadmium	ND	0.12	1.0	mg/Kg		12/30/2004 19:32	
Chromium	14	0.40	2.0	mg/Kg		12/30/2004 19:32	
Cobalt	6.4	0.13	1.0	mg/Kg		12/30/2004 19:32	
Copper	13	0.15	2.0	mg/Kg		12/30/2004 19:32	
Lead	2.9	0.12	1.0	mg/Kg		12/30/2004 19:32	
Molybdenum	0.46	0.12	2.0	mg/Kg		12/30/2004 19:32	
Nickel	7.8	0.21	2.0	mg/Kg		12/30/2004 19:32	
Selenium	ND	0.55	2.0	mg/Kg		12/30/2004 19:32	
Silver	ND	0.15	1.0	mg/Kg		12/30/2004 19:32	
Thallium	ND	0.15	1.0	mg/Kg		12/30/2004 19:32	
Vanadium	25	0.67	10	mg/Kg		12/30/2004 19:32	
Zinc	43	0.55	2.0	mg/Kg		12/30/2004 19:32	

Metals - ICP/MS

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CA DHS ELAP# 2496

Prep(s): 3050B Test(s): 6020

Sample ID: **DP-5-15** Lab ID: 2004-12-0731 - 28
Sampled: 12/16/2004 11:11 Extracted: 12/28/2004 10:05

Received: 12/21/2004 10:10

Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	ND	0.14	2.0	mg/Kg	10.00	12/30/2004 19:35	
Arsenic	0.64	0.42	2.0	mg/Kg	10.00		
Barium	42	0.14	1.0	mg/Kg	10.00		
Beryllium	ND	0.16	1.0	mg/Kg	10.00	12/30/2004 19:35	
Cadmium	ND	0.12	1.0	mg/Kg		12/30/2004 19:35	
Chromium	6.7	0.40	2.0	mg/Kg		12/30/2004 19:35	
Cobalt	2.4	0.13	1.0	mg/Kg		12/30/2004 19:35	
Copper	5.0	0.15	2.0	mg/Kg		12/30/2004 19:35	
Lead	1.2	0.12	1.0	mg/Kg		12/30/2004 19:35	
Molybdenum	0.35	0.12	2.0	mg/Kg		12/30/2004 19:35	
Nickel	5.4	0.21	2.0	mg/Kg		12/30/2004 19:35	
Selenium	ND	0.55	2.0	mg/Kg		12/30/2004 19:35	
Silver	ND	0.15	1.0	mg/Kg		12/30/2004 19:35	
Thallium	ND	0.15	1.0	mg/Kg		12/30/2004 19:35	
Vanadium	9.8	0.67	10	mg/Kg		12/30/2004 19:35	
Zinc	16	0.55	2.0	mg/Kg		12/30/2004 19:35	

Metals - ICP/MS

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Sampled: 12/16/2004 11:19

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CA DHS ELAP# 2496

Prep(s): 3050B Test(s):

Sample ID: **DP-5-20** Lab ID: 2004-12-0731 - 29

Received: 12/21/2004 10:10

Extracted:

6020

12/28/2004 10:05

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Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	ND	0.14	2.0	mg/Kg	10.00	12/30/2004 19:39	
Arsenic	0.85	0.42	2.0	mg/Kg	10.00	12/30/2004 19:39	
Barium	30	0.14	1.0	mg/Kg	10.00	12/30/2004 19:39	
Beryllium	ND	0.16	1.0	mg/Kg	10.00	12/30/2004 19:39	
Cadmium	ND	0.12	1.0	mg/Kg		12/30/2004 19:39	
Chromium	6.9	0.40	2.0	mg/Kg		12/30/2004 19:39	
Cobalt	1.9	0.13	1.0	mg/Kg		12/30/2004 19:39	
Copper	5.4	0.15	2.0	mg/Kg		12/30/2004 19:39	
Lead	1.1	0.12	1.0	mg/Kg		12/30/2004 19:39	
Molybdenum	0.21	0.12	2.0	mg/Kg		12/30/2004 19:39	
Nickel	4.6	0.21	2.0	mg/Kg		12/30/2004 19:39	
Selenium	ND	0.55	2.0	mg/Kg		12/30/2004 19:39	
Silver	ND	0.15	1.0	mg/Kg		12/30/2004 19:39	
Thallium	ND	0.15	1.0	mg/Kg		12/30/2004 19:39	
Vanadium	7.9	0.67	10	mg/Kg		12/30/2004 19:39	
Zinc	12	0.55	2.0	mg/Kg		12/30/2004 19:39	

Metals - ICP/MS

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CA DHS ELAP# 2496

Prep(s): 3050B Test(s): 6020

Sample ID: DP-5-25 Lab ID: 2004-12-0731 - 30 Sampled: 12/16/2004 11:29 Extracted: 12/28/2004 10:05 Matrix: Soil

Received: 12/21/2004 10:10

QC Batch#: 2004/12/28-05.67

Compound Conc. MDL RL Unit Dilution Analyzed Flag Antimony ND 0.14 2.0 10.00 12/30/2004 19:42 mg/Kg Arsenic 0.74 0.42 2.0 10.00 12/30/2004 19:42 mg/Kg Barium 41 0.14 1.0 mg/Kg 10.00 12/30/2004 19:42 Beryllium ND 0.16 1.0 mg/Kg 10.00 12/30/2004 19:42 Cadmium 0.11 0.12 1.0 mg/Kg 10.00 12/30/2004 19:42 Chromium 7.7 0.40 2.0 mg/Kg 10.00 12/30/2004 19:42 Cobalt 2.7 0.13 1.0 mg/Kg 10.00 12/30/2004 19:42 Copper 6.1 0.15 2.0 10.00 12/30/2004 19:42 mg/Kg Lead 4.4 0.12 1.0 10.00 12/30/2004 19:42 mg/Kg Molybdenum 0.21 0.12 2.0 mg/Kg 10.00 12/30/2004 19:42 Nickel 5.2 0.21 2.0 mg/Kg 10.00 12/30/2004 19:42 Selenium ND 0.55 2.0 mg/Kg 10.00 12/30/2004 19:42 Silver ND 0.15 1.0 10.00 12/30/2004 19:42 mg/Kg Thallium ND 0.15 1.0 10.00 12/30/2004 19:42 mg/Kg Vanadium 10 0.67 10.00 12/30/2004 19:42 10 mg/Kg Zinc 17 0.55 2.0 10.00 12/30/2004 19:42 mg/Kg

Metals - ICP/MS

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CA DHS ELAP# 2496

Prep(s): 3050B Test(s): 6020

Sample ID: **DP-6-1** Lab ID: 2004-12-0731 - 31

 Sampled:
 12/16/2004 10:31
 Extracted:
 12/28/2004 10:05

 Matrix:
 Soil
 QC Batch#:
 2004/12/28-05.67

Received: 12/21/2004 10:10

Compound Conc. MDL RL Unit Dilution Analyzed Flag **Antimony** ND 0.14 2.0 10.00 12/30/2004 19:46 mg/Kg Arsenic 1.4 0.42 2.0 mg/Kg 10.00 12/30/2004 19:46 Barium 90 0.14 1.0 mg/Kg 10.00 12/30/2004 19:46 Beryllium 0.20 0.16 1.0 10.00 12/30/2004 19:46 mg/Kg Cadmium ND 10.00 12/30/2004 19:46 0.12 1.0 mg/Kg Chromium 8.4 0.40 2.0 mg/Kg 10.00 12/30/2004 19:46 Cobalt 5.9 0.13 1.0 mg/Kg 10.00 12/30/2004 19:46 Copper 11 2.0 mg/Kg 10.00 12/30/2004 19:46 0.15 Lead 6.3 0.12 1.0 mg/Kg 10.00 12/30/2004 19:46 Molybdenum 0.23 2.0 10.00 12/30/2004 19:46 0.12 mg/Kg Nickel 150 0.21 2.0 mg/Kg 10.00 12/30/2004 19:46 Selenium ND 2.0 0.55 mg/Kg 10.00 12/30/2004 19:46 Silver ND 0.15 1.0 10.00 12/30/2004 19:46 mg/Kg Thallium ND 0.15 1.0 10.00 12/30/2004 19:46 mg/Kg Vanadium 22 10.00 12/30/2004 19:46 0.67 10 mg/Kg Zinc 41 0.55 2.0 10.00 12/30/2004 19:46 mg/Kg

Metals - ICP/MS

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CA DHS ELAP# 2496

Prep(s): 3050B Test(s): 6020

Sample ID: **DP-6-5** Lab ID: 2004-12-0731 - 32

Received: 12/21/2004 10:10

Sampled: 12/16/2004 13:20 Extracted: 12/28/2004 10:05

Matrix: Soil QC Batch#: 2004/12/28-05.67

Compound Conc. MDL RL Unit Dilution Analyzed Flag **Antimony** ND 0.14 2.0 10.00 12/30/2004 19:50 mg/Kg Arsenic 0.72 0.42 2.0 10.00 12/30/2004 19:50 mg/Kg **Barium** 35 0.14 1.0 mg/Kg 10.00 12/30/2004 19:50 Beryllium ND 0.16 1.0 10.00 12/30/2004 19:50 mg/Kg Cadmium ND 0.12 1.0 10.00 12/30/2004 19:50 mg/Kg Chromium 3.1 0.40 2.0 mg/Kg 10.00 12/30/2004 19:50 Cobalt 2.2 0.13 1.0 10.00 12/30/2004 19:50 mg/Kg Copper 4.6 0.15 2.0 mg/Kg 10.00 12/30/2004 19:50 Lead 1.1 0.12 1.0 mg/Kg 10.00 12/30/2004 19:50 Molybdenum ND 0.12 2.0 10.00 12/30/2004 19:50 mg/Kg Nickel 2.7 0.21 2.0 mg/Kg 10.00 12/30/2004 19:50 Selenium ND 0.55 2.0 10.00 12/30/2004 19:50 mg/Kg Silver ND 0.15 1.0 10.00 12/30/2004 19:50 mg/Kg Thallium ND 0.15 1.0 10.00 12/30/2004 19:50 mg/Kg Vanadium 9.1 10.00 12/30/2004 19:50 0.67 10 mg/Kg Zinc 14 0.55 2.0 10.00 12/30/2004 19:50 mg/Kg

Metals - ICP/MS

STL Los Angeles

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Attn.: Sabina Sudoko 1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439

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Tel: (925) 484-1919 Fax: (925) 484-1096 www.stl-inc.com www.chromalab.com

CA DHS ELAP# 2496

Prep(s): 3050B Test(s): 6020

Sample ID: **DP-6-10** Lab ID: 2004-12-0731 - 33 Sampled: 12/16/2004 13:27 Extracted: 12/28/2004 10:05

Received: 12/21/2004 10:10

Sampled: 12/16/2004 13:27 Extracted: 12/28/2004 10:05

Matrix: Soil QC Batch#: 2004/12/28-05.67

Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	ND	0.14	2.0	mg/Kg	10.00	12/30/2004 20:24	
Arsenic	0.84	0.42	2.0	mg/Kg	10.00		
Barium	68	0.14	1.0	mg/Kg	10.00	12/30/2004 20:24	
Beryllium	0.18	0.16	1.0	mg/Kg	10.00	12/30/2004 20:24	
Cadmium	ND	0.12	1.0	mg/Kg	10.00	12/30/2004 20:24	
Chromium	8.9	0.40	2.0	mg/Kg	10.00	12/30/2004 20:24	
Cobalt	4.1	0.13	1.0	mg/Kg	10.00	12/30/2004 20:24	
Copper	8.8	0.15	2.0	mg/Kg	10.00	12/30/2004 20:24	
Lead	2.2	0.12	1.0	mg/Kg	10.00	12/30/2004 20:24	
Molybdenum	1.2	0.12	2.0	mg/Kg	10.00	12/30/2004 20:24	
Nickel	11	0.21	2.0	mg/Kg	10.00	12/30/2004 20:24	
Selenium	ND	0.55	2.0	mg/Kg	10.00	12/30/2004 20:24	
Silver	ND	0.15	1.0	mg/Kg	10.00	12/30/2004 20:24	
Thallium	ND	0.15	1.0	mg/Kg	10.00	12/30/2004 20:24	
Vanadium	16	0.67	10	mg/Kg	10.00	12/30/2004 20:24	
Zinc	30	0.55	2.0	mg/Kg	10.00	12/30/2004 20:24	

Metals - ICP/MS

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CA DHS ELAP# 2496

Prep(s): 3050B Test(s): 6020

Sample ID: **DP-6-15** Lab ID: 2004-12-0731 - 34

Received: 12/21/2004 10:10

 Sampled:
 12/16/2004 13:39
 Extracted:
 12/28/2004 12:27

 Matrix:
 Soil
 QC Batch#:
 2004/12/28-06.67

Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	ND	0.14	2.0	mg/Kg	10.00	12/30/2004 20:44	
Arsenic	0.57	0.42	2.0	mg/Kg	10.00	12/30/2004 20:44	
Barium	36	0.14	1.0	mg/Kg	10.00	12/30/2004 20:44	
Beryllium	0.12	0.16	1.0	mg/Kg	10.00	12/30/2004 20:44	
Cadmium	ND	0.12	1.0	mg/Kg	10.00	12/30/2004 20:44	
Chromium	4.1	0.40	2.0	mg/Kg		12/30/2004 20:44	
Cobalt	2.2	0.13	1.0	mg/Kg	10.00	12/30/2004 20:44	
Copper	5.9	0.15	2.0	mg/Kg	10.00	12/30/20 <b>04</b> 20:44	
Lead	1.3	0.12	1.0	mg/Kg	10.00	12/30/2004 20:44	
Molybdenum	0.25	0.12	2.0	mg/Kg	10.00	12/30/2004 20:44	
Nickel	3.3	0.21	2.0	mg/Kg	10.00	12/30/2004 20:44	
Selenium	ND	0.55	2.0	mg/Kg	10.00	12/30/2004 20:44	
Silver	ND	0.15	1.0	mg/Kg	10.00	12/30/2004 20:44	
Thallium	ND	0.15	1.0	mg/Kg	10.00	12/30/2004 20:44	
Vanadiu <b>m</b>	9.8	0.67	10	mg/Kg		12/30/2004 20:44	
Zinc	17	0.55	2.0	mg/Kg		12/30/2004 20:44	

Metals - ICP/MS

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CA DHS ELAP# 2496

Prep(s): 3050B Test(s): 6020

Sample ID: **DP-6-20** Lab ID: 2004-12-0731 - 35

Received: 12/21/2004 10:10

Sampled: 12/16/2004 13:45 Extracted: 12/28/2004 12:27

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Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	ND	0.14	2.0	mg/Kg	10.00	12/30/2004 20:55	
Arsenic	0.60	0.42	2.0	mg/Kg	10.00	12/30/2004 20:55	
Barium	47	0.14	1.0	mg/Kg	10.00	12/30/2004 20:55	
Beryllium	0.10	0.16	1.0	mg/Kg	10.00	12/30/2004 20:55	
Cadmium	ND	0.12	1.0	mg/Kg	10.00	12/30/2004 20:55	
Chromium	4.2	0.40	2.0	mg/Kg	10.00	12/30/2004 20:55	
Cobalt	2.5	0.13	1.0	mg/Kg	10.00	12/30/2004 20:55	
Copper	4.8	0.15	2.0	mg/Kg	10.00	12/30/2004 20:55	
Lead	1.2	0.12	1.0	mg/Kg	10.00	12/30/2004 20:55	
Molybdenum	0.21	0.12	2.0	mg/Kg	10.00	12/30/2004 20:55	
Nickel	3.7	0.21	2.0	mg/Kg	10.00	12/30/2004 20:55	
Selenium	ND	0.55	2.0	mg/Kg	10.00	12/30/2004 20:55	
Silver	ND	0.15	1.0	mg/Kg	10.00	12/30/2004 20:55	
Thallium	ND	0.15	1.0	mg/Kg	10.00	12/30/2004 20:55	
Vanadium	10	0.67	10	mg/Kg	10.00	12/30/2004 20:55	
Zinc	15	0.55	2.0	mg/Kg	10.00	12/30/2004 20:55	

Metals - ICP/MS

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CA DHS ELAP# 2496

Prep(s): 3050B

Sample ID: DP-6-25

Sampled: 12/16/2004 13:54

Matrix: Soil

Test(s): 6020

Received: 12/21/2004 10:10

Lab ID: 2004-12-0731 - 36

Extracted: 12/28/2004 12:27

Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	ND	0.14	2.0	mg/Kg	10.00	12/30/2004 20:59	
Arsenic	1.4	0.42	2.0	mg/Kg	10.00	12/30/2004 20:59	
Barium	46	0.14	1.0	mg/Kg	10.00	12/30/2004 20:59	
Beryllium	0.13	0.16	1.0	mg/Kg	10.00	12/30/2004 20:59	
Cadmium	ND	0.12	1.0	mg/Kg	10.00	12/30/2004 20:59	
Chromium	8.9	0.40	2.0	mg/Kg	10.00	12/30/2004 20:59	
Cobalt	4.0	0.13	1.0	mg/Kg	10.00	12/30/2004 20:59	
Copper	7.1	0.15	2.0	mg/Kg	10.00	12/30/2004 20:59	
Lead	1.8	0.12	1.0	mg/Kg	10.00	12/30/2004 20:59	
Molybdenum	0.24	0.12	2.0	mg/Kg	10.00	12/30/2004 20:59	
Nickel	5.4	0.21	2.0	mg/Kg	10.00	12/30/2004 20:59	
Selenium	ND	0.55	2.0	mg/Kg	10.00	12/30/2004 20:59	
Silver	ND	0.15	1.0	mg/Kg	10.00	12/30/2004 20:59	
Thallium	ND	0.15	1.0	mg/Kg	10.00	12/30/2004 20:59	
Vanadium	19	0.67	10	mg/Kg	10.00	12/30/2004 20:59	
Zinc	20	0.55	2.0	mg/Kg	10.00	12/30/2004 20:59	

Metals - ICP/MS

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CA DHS ELAP# 2496

Prep(s): 3050B Test(s): 6020

Sample ID: **DP-7-1** Lab ID: 2004-12-0731 - 37

Received: 12/21/2004 10:10

 Sampled:
 12/16/2004 10:35
 Extracted:
 12/28/2004 12:27

 Matrix:
 Soil
 QC Batch#:
 2004/12/28-06.67

				····			
Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	ND	0.14	2.0	mg/Kg	10.00	12/30/2004 21:03	
Arsenic	1.1	0.42	2.0	mg/Kg	10.00	12/30/2004 21:03	
Barium	90	0.14	1.0	mg/Kg	10.00	12/30/2004 21:03	
Beryllium	0.21	0.16	1.0	mg/Kg	10.00	12/30/2004 21:03	
Cadmium	ND	0.12	1.0	mg/Kg		12/30/2004 21:03	
Chromium	9.8	0.40	2.0	mg/Kg	10.00	12/30/2004 21:03	
Cobalt	6.0	0.13	1.0	mg/Kg	10.00	12/30/2004 21:03	
Copper	12	0.15	2.0	mg/Kg	10.00	12/30/2004 21:03	
Lead	9.0	0.12	1.0	mg/Kg		12/30/2004 21:03	
Molybdenum	0.21	0.12	2.0	mg/Kg	10.00	12/30/2004 21:03	
Nickel	7.4	0.21	2.0	mg/Kg	10.00	12/30/2004 21:03	
Selenium	ND	0.55	2.0	mg/Kg		12/30/2004 21:03	
Silver	ND	0.15	1.0	mg/Kg		12/30/2004 21:03	
Thallium	ND	0.15	1.0	mg/Kg		12/30/2004 21:03	
Vanadium	25	0.67	10	mg/Kg		12/30/2004 21:03	
Zinc	46	0.55	2.0	mg/Kg		12/30/2004 21:03	

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CA DHS ELAP# 2496

Prep(s): 3050B

Sample ID: DP-7-5

12/16/2004 14:02

Matrix: Soil

Sampled:

Test(s): 6020

Received: 12/21/2004 10:10

Extracted:

Lab ID: 2004-12-0731 - 38

QC Batch#: 2004/12/28-06.67

12/28/2004 12:27

Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	ND	0.14	2.0	mg/Kg	10.00	12/30/2004 21:22	
Arsenic	0.38	0.42	2.0	mg/Kg		12/30/2004 21:22	
Barium	48	0.14	1.0	mg/Kg	10.00	12/30/2004 21:22	
Beryllium	ND	0.16	1.0	mg/Kg	10.00	12/30/2004 21:22	
Cadmium	ND	0.12	1.0	mg/Kg	10.00	12/30/2004 21:22	
Chromium	5.4	0.40	2.0	mg/Kg	10.00	12/30/2004 21:22	
Cobalt	2.7	0.13	1.0	mg/Kg	10.00	12/30/2004 21:22	
Copper	4.5	0.15	2.0	mg/Kg	10.00	12/30/2004 21:22	
Lead	1.3	0.12	1.0	mg/Kg	10.00	12/30/2004 21:22	
Molybde <b>n</b> um	0.25	0.12	2.0	mg/Kg	10.00	12/30/2004 21:22	
Nickel	160	0.21	2.0	mg/Kg	10.00	12/30/2004 21:22	
Selenium	ND	0.55	2.0	mg/Kg	10.00	12/30/2004 21:22	
Silver	ND	0.15	1.0	mg/Kg	10.00	12/30/2004 21:22	
Thallium	ND	0.15	1.0	mg/Kg		12/30/2004 21:22	
Vanadium	12	0.67	10	mg/Kg		12/30/2004 21:22	
Zinc	21	0.55	2.0	mg/Kg		12/30/2004 21:22	

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CA DHS ELAP# 2496

Prep(s): 3050B Test(s):

Sample ID: **DP-7-10** Lab ID: 2004-12-0731 - 39

Received: 12/21/2004 10:10

6020

Sampled: 12/16/2004 14:02 Extracted: 12/28/2004 12:27

Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	ND	0.14	2.0	mg/Kg	10.00	12/30/2004 21:26	
Arsenic	0.39	0.42	2.0	mg/Kg	10.00	12/30/2004 21:26	
Barium	50	0.14	1.0	mg/Kg	10.00	12/30/2004 21:26	
Beryllium	ND	0.16	1.0	mg/Kg	10.00	12/30/2004 21:26	
Cadmium	ND	0.12	1.0	mg/Kg		12/30/2004 21:26	
Chromium	15	0.40	2.0	mg/Kg	10.00	12/30/2004 21:26	
Cobalt	2.3	0.13	1.0	mg/Kg	10.00	12/30/2004 21:26	
Copper	4.5	0.15	2.0	mg/Kg	10.00	12/30/2004 21:26	
Lead	1.0	0.12	1.0	mg/Kg	10.00	12/30/2004 21:26	
Molybdenum	0.40	0.12	2.0	mg/Kg	10.00	12/30/2004 21:26	
Nickel	8.3	0.21	2.0	mg/Kg	1	12/30/2004 21:26	
Selenium	ND	0.55	2.0	mg/Kg	10.00	12/30/2004 21:26	
Silver	ND	0.15	1.0	mg/Kg	10.00	12/30/2004 21:26	
Thallium	ND	0.15	I	mg/Kg	1	12/30/2004 21:26	
Vanadium	9.6	0.67	1	mg/Kg		12/30/2004 21:26	
Zinc	14	0.55	2.0	mg/Kg		12/30/2004 21:26	

Metals - ICP/MS

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CA DHS ELAP# 2496

Prep(s): 3050B Test(s):

Sample ID: **DP-7-15** Lab ID: 2004-12-0731 - 40 Sampled: 12/16/2004 14:08 Extracted: 12/28/2004 12:27

Received: 12/21/2004 10:10

6020

Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	ND	0.14	2.0	mg/Kg	10.00	12/30/2004 21:30	
Arsenic	0.38	0.42	2.0	mg/Kg	10.00	12/30/2004 21:30	
Barium	48	0.14	1.0	mg/Kg	10.00	12/30/2004 21:30	
Beryllium	ND	0.16	1.0	mg/Kg	10.00	12/30/2004 21:30	
Cadmium	ND	0.12	1.0	mg/Kg	10.00	12/30/2004 21:30	
Chromium	20	0.40	2.0	mg/Kg	10.00	12/30/2004 21:30	
Cobalt	2.7	0.13	1.0	mg/Kg	10.00	12/30/2004 21:30	
Copper	5.6	0.15	2.0	mg/Kg	10.00	12/30/2004 21:30	
Lead	1.2	0.12	1.0	mg/Kg	10.00	12/30/2004 21:30	
Molybdenum	0.37	0.12	2.0	mg/Kg	10.00	12/30/2004 21:30	
Nickel	10	0.21	2.0	mg/Kg	10.00	12/30/2004 21:30	
Selenium	ND	0.55	2.0	mg/Kg	10.00	12/30/2004 21:30	
Silver	ND	0.15	1.0	mg/Kg	10.00	12/30/2004 21:30	
Thallium	ND	0.15	1.0	mg/Kg	10.00	12/30/2004 21:30	
Vanadium	13	0.67	10	mg/Kg	10.00	12/30/2004 21:30	
Zinc	18	0.55	2.0	mg/Kg	10.00	12/30/2004 21:30	

Metals - ICP/MS

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CA DHS ELAP# 2496

Prep(s): 3050B

Sample ID: DP-7-20

Sampled: 12/16/2004 14:15

Matrix: Soil

Test(s): 6020

Received: 12/21/2004 10:10

Lab ID: 2004-12-0731 - 41

Extracted: 12/2

12/28/2004 12:27

Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	ND	0.14	2.0	mg/Kg	10.00	12/30/2004 21:33	
Arsenic	0.49	0.42	2.0	mg/Kg	10.00	12/30/2004 21:33	
Barium	37	0.14	1.0	mg/Kg	10.00	12/30/2004 21:33	
Beryllium	ND	0.16	1.0	mg/Kg	10.00	12/30/2004 21:33	
Cadmium	ND	0.12	1.0	mg/Kg	10.00	12/30/2004 21:33	
Chromium	6.4	0.40	2.0	mg/Kg	10.00	12/30/2004 21:33	
Cobalt	2.5	0.13	1.0	mg/Kg	10.00	12/30/2004 21:33	
Copper	4.6	0.15	2.0	mg/Kg	10.00	12/30/2004 21:33	
Lead	1.2	0.12	1.0	mg/Kg	10.00	12/30/2004 21:33	
Molybdenum	ND	0.12	2.0	mg/Kg	10.00	12/30/2004 21:33	
Nickel	4.0	0.21	2.0	mg/Kg	10.00	12/30/2004 21:33	
Selenium	ND	0.55	2.0	mg/Kg	10.00	12/30/2004 21:33	
Silver	ND	0.15	1.0	mg/Kg	10.00	12/30/2004 21:33	
Thallium	ND	0.15	1.0	mg/Kg	10.00	12/30/2004 21:33	
Vanadium	11	0.67	10	mg/Kg	10.00	12/30/2004 21:33	
Zinc	14	0.55	2.0	mg/Kg	10.00	12/30/2004 21:33	

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CA DHS ELAP# 2496

Prep(s): 3050B

Sample ID: DP-7-25

Sampled: 12/16/2004 14:25

Matrix: Soil

Test(s): 6020

Received: 12/21/2004 10:10

Lab ID: 2004-12-0731 - 42

Extracted: 12/28/2004 12:27

QC Batch#: 2004/12/28-06.67

Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	ND	0.14	2.0	mg/Kg	10.00	12/30/2004 21:37	
Arsenic	0.59	0.42	2.0	mg/Kg	10.00	12/30/2004 21:37	
Barium	39	0.14	1.0	mg/Kg	10.00	12/30/2004 21:37	
Beryllium	ND	0.16	1.0	mg/Kg	10.00	12/30/2004 21:37	
Cadmium	ND	0.12	1.0	mg/Kg	10.00	12/30/2004 21:37	
Chromium	10	0.40	2.0	mg/Kg	10.00	12/30/2004 21:37	
Cobalt	2.9	0.13	1.0	mg/Kg	10.00	12/30/2004 21:37	
Copper	4.8	0.15	2.0	mg/Kg	10.00	12/30/2004 21:37	
Lead	1.1	0.12	1.0	mg/Kg	10.00	12/30/2004 21:37	
Molybdenum	0.51	0.12	2.0	mg/Kg	10.00	12/30/2004 21:37	
Nickel	6.4	0.21	2.0	mg/Kg	10.00	12/30/2004 21:37	
Selenium	ND	0.55	2.0	mg/Kg	10.00	12/30/2004 21:37	
Silver	ND	0.15	1.0	mg/Kg	10.00	12/30/2004 21:37	
Thallium	ND	0.15	1.0	mg/Kg	10.00	12/30/2004 21:37	
Vanadium	11	0.67	10	mg/Kg	10.00	12/30/2004 21:37	
Zinc	16	0.55	2.0	mg/Kg	10.00	12/30/2004 21:37	

Metals - ICP/MS

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Project: E4L170439

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CA DHS ELAP# 2496

Prep(s): 3050B

Sample ID: DP-8-1

12/16/2004 10:46

Sampled: Matrix:

Soil

Test(s): 6020

Lab ID:

2004-12-0731 - 43

Extracted:

Received: 12/21/2004 10:10

12/28/2004 12:27

QC Batch#: 2004/12/28-06.67

Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	0.29	0.14	2.0	mg/Kg	10.00	12/30/2004 21:41	
Arsenic	1.8	0.42	2.0	mg/Kg	10.00	12/30/2004 21:41	
Barium	89	0.14	1.0	mg/Kg	10.00	12/30/2004 21:41	
Beryllium	0.16	0.16	1.0	mg/Kg	10.00	12/30/2004 21:41	
Cadmium	0.64	0.12	1.0	mg/Kg	10.00	12/30/2004 21:41	
Chromium	11	0.40	2.0	mg/Kg	10.00	12/30/2004 21:41	
Cobalt	5.9	0.13	1.0	mg/Kg	10.00	12/30/2004 21:41	
Copper	26	0.15	2.0	mg/Kg	10.00	12/30/2004 21:41	
Lead	37	0.12	1.0	mg/Kg	10.00	12/30/2004 21:41	
Molybdenum	0.57	0.12	2.0	mg/Kg	10.00	12/30/2004 21:41	
Nickel	12	0.21	2.0	mg/Kg	10.00	12/30/2004 21:41	
Selenium	ND	0.55	2.0	mg/Kg	10.00	12/30/2004 21:41	
Silver	0.10	0.15	1.0	mg/Kg	10.00	12/30/2004 21:41	
Thallium	ND	0.15	1.0	mg/Kg	10.00	12/30/2004 21:41	
Vanadium	20	0.67	10	mg/Kg	10.00	12/30/2004 21:41	
Zinc	91	0.55	2.0	mg/Kg	10.00	12/30/2004 21:41	

Metals - ICP/MS

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CA DHS ELAP# 2496

Prep(s): 3050B Test(s): 6020

Sample ID: **DP-8-5** Lab ID: 2004-12-0731 - 44

Received: 12/21/2004 10:10

Sampled: 12/16/2004 15:35 Extracted: 12/28/2004 12:27

Matrix: Soil QC Batch#: 2004/12/28-06.67

Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	ND	0.14	2.0	mg/Kg	10.00	12/30/2004 21:44	<u> </u>
Arsenic	0.21	0.42	2.0	mg/Kg	10.00	12/30/2004 21:44	
Barium	35	0.14	1.0	mg/Kg	10.00	12/30/2004 21:44	
Beryllium	ND	0.16	1.0	mg/Kg	10.00	12/30/2004 21:44	
Cadmium	ND	0.12	1.0	mg/Kg	10.00	12/30/2004 21:44	
Chromium	6.4	0.40	2.0	mg/Kg	10.00	12/30/2004 21:44	
Cobalt	1.9	0.13	1.0	mg/Kg	10.00	12/30/2004 21:44	
Copper	3.7	0.15	2.0	mg/Kg	10.00	12/30/2004 21:44	
Lead	0.98	0.12	1.0	mg/Kg	10.00	12/30/2004 21:44	
Molybdenum	0.26	0.12	2.0	mg/Kg	10.00	12/30/2004 21:44	
Nickel	4.6	0.21	2.0	mg/Kg	10.00	12/30/2004 21:44	
Selenium	ND	0.55	2.0	mg/Kg	10.00	12/30/2004 21:44	
Silver	ND	0.15	1.0	mg/Kg	10.00	12/30/2004 21:44	
Thallium	ND	0.15	1.0	mg/Kg	10.00	12/30/2004 21:44	
Vanadium	7.4	0.67	10	mg/Kg	10.00	12/30/2004 21:44	
Zinc	28	0.55	2.0	mg/Kg	10.00	12/30/2004 21:44	

Metals - ICP/MS

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CA DHS ELAP# 2496

Prep(s): 3050B Test(s): 6020

15

19

0.67

0.55

Sample ID: **DP-8-10** Lab ID: 2004-12-0731 - 45

Received: 12/21/2004 10:10

Sampled: 12/16/2004 15:38 Extracted: 12/28/2004 12:27

Matrix: Soil QC Batch#: 2004/12/28-06.67

Compound Conc. MDL RL Unit Dilution Analyzed Flag **Antimony** ND 0.14 2.0 10.00 12/30/2004 21:48 mg/Kg Arsenic 0.56 0.42 2.0 mg/Kg 10.00 12/30/2004 21:48 Barium 43 0.14 1.0 mg/Kg 10.00 12/30/2004 21:48 Beryllium ND 0.16 1.0 mg/Kg 10.00 12/30/2004 21:48 Cadmium ND 0.12 1.0 10.00 12/30/2004 21:48 mg/Kg Chromium 2.0 6.4 0.40 mg/Kg 10.00 12/30/2004 21:48 Cobalt 3.0 0.13 1.0 mg/Kg 10.00 12/30/2004 21:48 Copper 5.8 0.15 2.0 10.00 12/30/2004 21:48 mg/Kg Lead 1.4 0.12 1.0 10.00 12/30/2004 21:48 mg/Kg Molvbdenum 0.21 0.12 2.0 10.00 12/30/2004 21:48 mg/Kg Nickel 4.2 2.0 10.00 12/30/2004 21:48 0.21 mg/Kg Selenium 2.0 ND 10.00 12/30/2004 21:48 0.55 mg/Kg Silver ND 0.15 1.0 10.00 12/30/2004 21:48 mg/Kg 10.00 12/30/2004 21:48 Thallium ND 0.15 1.0 mg/Kg

10

2.0

mg/Kg

mg/Kg

10.00 12/30/2004 21:48

10.00 12/30/2004 21:48

Vanadium

Zinc

Metals - ICP/MS

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CA DHS ELAP# 2496

10.00 12/30/2004 21:52

10.00 12/30/2004 21:52

10.00 12/30/2004 21:52 10.00 12/30/2004 21:52

Prep(s): 3050B Test(s): 6020

ND

ND

28

43

Sample ID: **DP-8-15** Lab ID: 2004-12-0731 - 46

Received: 12/21/2004 10:10

Sampled: 12/16/2004 15:44 Extracted: 12/28/2004 12:27

Matrix: Soil QC Batch#: 2004/12/28-06.67

Compound Conc. MDL RL Unit Dilution Analyzed Flag **Antimony** ND 2.0 10.00 12/30/2004 21:52 0.14 mg/Kg Arsenic 1.4 10.00 12/30/2004 21:52 0.42 2.0 mg/Kg 10.00 12/30/2004 21:52 Barium 100 1.0 mg/Kg 0.14 10.00 12/30/2004 21:52 Beryllium 0.28 0.16 1.0 mg/Kg Cadmium 0.12 0.12 1.0 10.00 12/30/2004 21:52 mg/Kg Chromium 2.0 13 0.40 mg/Kg 10.00 12/30/2004 21:52 10.00 12/30/2004 21:52 Cobalt 7.3 0.13 1.0 mg/Kg Copper 15 2.0 10.00 12/30/2004 21:52 0.15 mg/Kg Lead 3.1 0.12 1.0 10.00 12/30/2004 21:52 mg/Kg Molybdenum 0.38 2.0 10.00 12/30/2004 21:52 0.12 mg/Kg Nickel 2.0 10 0.21 mg/Kg 10.00 12/30/2004 21:52 Selenium ND 2.0 10.00 12/30/2004 21:52 0.55 mg/Kg

1.0

1.0

10

2.0

mg/Kg

mg/Kg

mg/Kg

mg/Kg

0.15

0.15

0.67

0.55

Silver

Zinc

Thallium

Vanadium

Metals - ICP/MS

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Project: E4L170439 Received: 12/21/2004 10:10

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CA DHS ELAP# 2496

Prep(s): 3050B Test(s): 6020

Sample ID: **DP-8-20** Lab ID: 2004-12-0731 - 47

Sampled: 12/16/2004 15:53 Extracted: 12/28/2004 12:27 Matrix: Soil QC Batch#: 2004/12/28-06.67

Compound Conc. MDL RL Unit Dilution Analyzed Flag **Antimony** ND 0.14 2.0 10.00 12/30/2004 21:55 mg/Kg Arsenic 0.54 0.42 2.0 10.00 12/30/2004 21:55 mg/Kg Barium 56 10.00 12/30/2004 21:55 0.14 1.0 mg/Kg Beryllium 0.15 0.16 1.0 mg/Kg 10.00 12/30/2004 21:55 Cadmium ND 0.12 1.0 10.00 12/30/2004 21:55 mg/Kg Chromium 10 0.40 2.0 10.00 12/30/2004 21:55 mg/Kg Cobalt 3.7 0.13 1.0 mg/Kg 10.00 12/30/2004 21:55 Copper 7.1 2.0 0.15 10.00 12/30/2004 21:55 mg/Kg Lead 1.4 0.12 1.0 mg/Kg 10.00 12/30/2004 21:55 Molybdenum 0.51 0.12 2.0 mg/Kg 10.00 12/30/2004 21:55 Nickel 0.21 2.0 10.00 12/30/2004 21:55 6.1 mg/Kg Selenium ND 0.55 2.0 10.00 12/30/2004 21:55 mg/Kg Silver ND 1.0 0.15 10.00 12/30/2004 21:55 mg/Kg Thallium ND 0.15 1.0 mg/Kg 10.00 12/30/2004 21:55 Vanadium 17 0.67 10 mg/Kg 10.00 12/30/2004 21:55 Zinc 21 0.55 2.0 10.00 12/30/2004 21:55 mg/Kg

Metals - ICP/MS

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CA DHS ELAP# 2496

Prep(s): 3050B Test(s): 6020

 Sample ID:
 DP-8-25
 Lab ID:
 2004-12-0731 - 48

 Sampled:
 12/16/2004 16:03
 Extracted:
 12/28/2004 12:27

 Matrix:
 Soil
 QC Batch#:
 2004/12/28-06.67

Received: 12/21/2004 10:10

Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	ND	0.14	2.0	mg/Kg	10.00	12/30/2004 22:30	
Arsenic	0.58	0.42	2.0	mg/Kg	10.00	12/30/2004 22:30	
Barium	40	0.14	1.0	mg/Kg	10.00	12/30/2004 22:30	
Beryllium	0.11	0.16	1.0	mg/Kg	10.00	12/30/2004 22:30	
Cadmium	ND	0.12	1.0	mg/Kg	10.00	12/30/2004 22:30	
Chromium	12	0.40	2.0	mg/Kg	10.00	12/30/2004 22:30	
Cobalt	2.3	0.13	1.0	mg/Kg	10.00	12/30/2004 22:30	
Copper	6.6	0.15	2.0	mg/Kg	10.00	12/30/2004 22:30	
Lead	1.1	0.12	1.0	mg/Kg	10.00	12/30/2004 22:30	
Molybdenum	0.35	0.12	2.0	mg/Kg	10.00	12/30/2004 22:30	
Nickel	6.9	0.21	2.0	mg/Kg	10.00	12/30/2004 22:30	
Selenium	ND	0.55	2.0	mg/Kg	10.00	12/30/2004 22:30	
Silver	ND	0.15	1.0	mg/Kg	10.00	12/30/2004 22:30	
Thallium	ND	0.15	1.0	mg/Kg	10.00	12/30/2004 22:30	
Vanadium	10	0.67	10	mg/Kg	10.00	12/30/2004 22:30	
Zinc	15	0.55	2.0	mg/Kg	10.00	12/30/2004 22:30	

Metals - ICP/MS

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Project: E4L170439

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CA DHS ELAP# 2496

Prep(s): 3050B Test(s): 6020

Sample ID: **DP-9-1** Lab ID: 2004-12-073**1** - 49
Sampled: 12/16/2004 10:51 Extracted: 12/28/2004 12:27

Received: 12/21/2004 10:10

Sampled: 12/16/2004 10:51 Extracted: 12/28/2004 12:27

Matrix: Soil QC Batch#: 2004/12/28-06.67

Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	0.21	0.14	2.0	mg/Kg	10.00	12/30/2004 22:33	
Arsenic	1.4	0.42	2.0	mg/Kg	10.00	12/30/2004 22:33	
Barium	90	0.14	1.0	mg/Kg	10.00	12/30/2004 22:33	
Beryllium	0.17	0.16	1.0	mg/Kg	10.00	12/30/2004 22:33	
Cadmium	0.65	0.12	1.0	mg/Kg	10.00	12/30/2004 22:33	
Chromium	10	0.40	2.0	mg/Kg	10.00	12/30/2004 22:33	
Cobalt	4.8	0.13	1.0	mg/Kg	10.00	12/30/2004 22:33	
Copper	29	0.15	2.0	mg/Kg	10.00	12/30/2004 22:33	
Lead	34	0.12	1.0	mg/Kg	10.00	12/30/2004 22:33	
Molybdenum	0.38	0.12	2.0	mg/Kg	10.00	12/30/2004 22:33	
Nickel	8.7	0.21	2.0	mg/Kg	10.00	12/30/2004 22:33	
Selenium	ND	0.55	2.0	mg/Kg	10.00	12/30/2004 22:33	
Silver	0.17	0.15	1.0	mg/Kg	10.00	12/30/2004 22:33	
Thallium	ND	0.15	1.0	mg/Kg	10.0 <del>0</del>	12/30/2004 22:33	
Vanadium	18	0.67	10	mg/Kg	10.00	12/30/2004 22:33	
Zinc	120	0.55	2.0	mg/Kg	10.00	12/30/2004 22:33	

Metals - ICP/MS

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CA DHS ELAP# 2496

Prep(s): 3050B

Sample ID: DP-9-5

12/16/2004 14:51

Matrix: Soil

Sampled:

Test(s): 6020

Received: 12/21/2004 10:10

Extracted:

Lab ID: 2004-12-0731 - 50

12/28/2004 12:27

QC Batch#: 2004/12/28-06.67

Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	ND	0.14	2.0	mg/Kg	10.00	12/30/2004 22:37	
Arsenic	0.60	0.42	2.0	mg/Kg	10.00	12/30/2004 22:37	
Barium	48	0.14	1.0	mg/Kg	10.00	12/30/2004 22:37	
Beryllium	ND	0.16	1.0	mg/Kg	10.00	12/30/2004 22:37	
Cadmium	3.4	0.12	1.0	mg/Kg	10.00	12/30/2004 22:37	
Chromium	9.6	0.40	2.0	mg/Kg	10.00	12/30/2004 22:37	
Cobalt	2.7	0.13	1.0	mg/Kg	10.00	12/30/2004 22:37	
Copper	4.5	0.15	2.0	mg/Kg	10.00	12/30/2004 22:37	
Lead	1.0	0.12	1.0	mg/Kg	10.00	12/30/2004 22:37	
Molybdenum	0.43	0.12	2.0	mg/Kg	10.00	12/30/2004 22:37	
Nickel	6.3	0.21	2.0	mg/Kg	10.00	12/30/2004 22:37	
Selenium	ND	0.55	2.0	mg/Kg	10.00	12/30/2004 22:37	
Silver	ND	0.15	1.0	mg/Kg	10.00	12/30/2004 22:37	
Thallium	ND	0.15	1.0	mg/Kg	10.00	12/30/2004 22:37	
Vanadium	10	0.67	10	mg/Kg	10.00	12/30/2004 22:37	
Zinc	17	0.55	2.0	mg/Kg	10.00	12/30/2004 22:37	

Metals - ICP/MS

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Project: E4L170439 Received: 12/21/2004 10:10

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CA DHS ELAP# 2496

Prep(s): 3050B Test(s): 6020

Sample ID: **DP-9-10** Lab ID: 2004-12-0731 - 51

Sampled: 12/16/2004 14:58 Extracted: 12/28/2004 12:27

Matrix: Soil QC Batch#: 2004/12/28-06.67

Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	ND	0.14	2.0	mg/Kg	10.00	12/30/2004 22:41	
Arsenic	0.55	0.42	2.0	mg/Kg	10.00	12/30/2004 22:41	
Barium	40	0.14	1.0	mg/Kg	10.00	12/30/2004 22:41	
Beryllium	ND	0.16	1.0	mg/Kg	10.00	12/30/2004 22:41	
Cadmium	0.13	0.12	1.0	mg/Kg	10.00	12/30/2004 22:41	
Chromium	5.7	0.40	2.0	mg/Kg	10.00	12/30/2004 22:41	
Cobalt	1.8	0.13	1.0	mg/Kg	10.00	12/30/2004 22:41	
Copper	3.5	0.15	2.0	mg/Kg	10.00	12/30/2004 22:41	
Lead	0.98	0.12	1.0	mg/Kg	10.00	12/30/2004 22:41	
Molybdenum	0.24	0.12	2.0	mg/Kg	10.00	12/30/2004 22:41	
Nickel	3.8	0.21	2.0	mg/Kg	10.00	12/30/2004 22:41	
Selenium	ND	0.55	2.0	mg/Kg	10.00	12/30/2004 22:41	
Silver	ND	0.15	1.0	mg/Kg	10.00	12/30/2004 22:41	
Thalliu <b>m</b>	ND	0.15	1.0	mg/Kg	10.00	12/30/2004 22:41	
Vanadium	7.7	0.67	10	mg/Kg	10.00	12/30/2004 22:41	
Zinc	12	0.55	2.0	mg/Kg	10.00	12/30/2004 22:41	

Metals - ICP/MS

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CA DHS ELAP# 2496

Prep(s): 3050B

Sample ID: DP-9-15

Sampled: 12/16/2004 15:03

Matrix: Soil

Test(s): 6020

Received: 12/21/2004 10:10

Lab ID: 2004-12-0731 - 52

Extracted: 12/28/2004 12:27

QC Batch#: 2004/12/28-06.67

Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	ND	0.14	2.0	mg/Kg	10.00	12/30/2004 22:44	
Arsenic	0.81	0.42	2.0	mg/Kg	10.00	12/30/2004 22:44	
Barium	36	0.14	1.0	mg/Kg	10.00	12/30/2004 22:44	
Beryllium	0.12	0.16	1.0	mg/Kg	10.00	12/30/2004 22:44	
Cadmium	1.0	0.12	1.0	mg/Kg	10.00	12/30/2004 22:44	
Chromium	6.2	0.40	2.0	mg/Kg	10.00	12/30/2004 22:44	
Cobalt	2.5	0.13	1.0	mg/Kg	10.00	12/30/2004 22:44	
Copper	7.4	0.15	2.0	mg/Kg	10.00	12/30/2004 22:44	
Lead	1.7	0.12	1.0	mg/Kg	10.00	12/30/2004 22:44	
Molybdenum	0.46	0.12	2.0	mg/Kg	10.00	12/30/2004 22:44	
Nickel	5.1	0.21	2.0	mg/Kg	10.00	12/30/2004 22:44	
Selenium	ND	0.55	2.0	mg/Kg	10.00	12/30/2004 22:44	
Silver	ND	0.15	1.0	mg/Kg	10.00	12/30/2004 22:44	
Thallium	ND	0.15	1.0	mg/Kg	10.00	12/30/2004 22:44	
Vanadium	9.9	0.67	10	mg/Kg	10.00	12/30/2004 22:44	
Zinc	15	0.55	2.0	mg/Kg	10.00	12/30/2004 22:44	

Metals - ICP/MS

STL Los Angeles

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Attn.: Sabina Sudoko 1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439

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**STL San Francisco** 1220 Quarry Lane Pleasanton, CA 94566

Tel: (925) 484-1919 Fax: (925) 484-1096 www.stl-inc.com www.chromalab.com

CA DHS ELAP# 2496

Prep(s): 3050B Test(s): 6020

 Sample ID: DP-9-20
 Lab ID: 2004-12-0731 - 53

 Sampled: 12/16/2004 15:08
 Extracted: 12/28/2004 12:27

 Matrix: Soil
 QC Batch#: 2004/12/28-06.67

Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	ND	0.14	2.0	mg/Kg	10.00	12/30/2004 22:48	
Arsenic	0.39	0.42	2.0	mg/Kg	10.00	12/30/2004 22:48	
Barium	37	0.14	1.0	mg/Kg	10.00	12/30/2004 22:48	
Beryllium	ND	0.16	1.0	mg/Kg	10.00	12/30/2004 22:48	
Cadmium	ND	0.12	1.0	mg/Kg	10.00	12/30/2004 22:48	
Chromium	8.5	0.40	2.0	mg/Kg	10.00	12/30/2004 22:48	
Cobalt	2.0	0.13	1.0	mg/Kg	10.00	12/30/2004 22:48	
Copper	3.9	0.15	2.0	mg/Kg	10.00	12/30/2004 22:48	
Lead	1.0	0.12	1.0	mg/Kg	10.00	12/30/2004 22:48	
Molybdenum	0.26	0.12	2.0	mg/Kg	10.00	12/30/2004 22:48	
Nickel	5.2	0.21	2.0	mg/Kg	10.00	12/30/2004 22:48	
Selenium	ND	0.55	2.0	mg/Kg	10.00	12/30/2004 22:48	
Silver	ND	0.15	1.0	mg/Kg	10.00	12/30/2004 22:48	
Thallium	ND	0.15	1.0	mg/Kg	10.00	12/30/2004 22:48	
Vanadium	7.6	0.67	10	mg/Kg	10.00	12/30/2004 22:48	
Zinc	13	0.55	2.0	mg/Kg	10.00	12/30/2004 22:48	

Received: 12/21/2004 10:10

Metals - ICP/MS

STL Los Angeles

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Tel: (925) 484-1919 Fax: (925) 484-1096 www.stl-inc.com www.chromalab.com

CA DHS ELAP# 2496

Prep(s): 3050B Test(s): 6020

Sample ID: **DP-9-25** Lab ID: 2004-12-0731 - 54

Received: 12/21/2004 10:10

Sampled: 12/16/2004 15:14 Extracted: 1/3/2005 06:46

Matrix: Soil QC Batch#: 2005/01/03-02.67

Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	0.28	0.14	2.0	mg/Kg	10.00	01/03/2005 14:56	
Arsenic	ND	0.42	2.0	mg/Kg	10.00	01/03/2005 14:56	
Barium	35	0.14	1.0	mg/Kg	10.00	01/03/2005 14:56	
Beryllium	0.12	0.16	1.0	mg/Kg	10.00	01/03/2005 14:56	
Cadmium	ND	0.12	1.0	mg/Kg	10.00	01/03/2005 14:56	
Chromium	5.7	0.40	2.0	mg/Kg	10.00	01/03/2005 14:56	
Cobalt	2.3	0.13	1.0	mg/Kg	10.00	01/03/2005 14:56	
Copper	4.5	0.15	2.0	mg/Kg	10.00	01/03/2005 14:56	
Lead	1.0	0.12	1.0	mg/Kg	10.00	01/03/2005 14:56	
Molybdenum	0.36	0.12	2.0	mg/Kg	10.00	01/03/2005 14:56	
Nickel	4.0	0.21	2.0	mg/Kg	10.00	01/03/2005 14:56	
Selenium	2.4	0.55	2.0	mg/Kg	10.00	01/03/2005 14:56	
Silver	ND	0.15	1.0	mg/Kg	10.00	01/03/2005 14:56	
Thallium	0.11	0.15	1.0	mg/Kg	10.00	01/03/2005 14:56	
Vanadium	9.1	0.67	10	mg/Kg	10.00	01/03/2005 14:56	
Zinc	14	0.55	2.0	mg/Kg	10.00	01/03/2005 14:56	

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CA DHS ELAP# 2496

Prep(s): 3010A

Sample ID: EB-1-121604

Sampled: 12/16/2004 15:25

Matrix:

Water

Test(s): 6020

Received: 12/21/2004 10:10

Lab ID:

2004-12-0731 - 55

Extracted:

12/22/2004 05:36

QC Batch#: 2004/12/22-01.67

Analysis Flag: . (See Legend and Note Section )

Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	ND	0.00011	0.0020	mg/L	1.00	12/30/2004 17:15	
Arsenic	ND	0.00083	0.0020	mg/L	1.00	12/30/2004 17:15	
Barium	0.015	0.00013	0.0010	mg/L	1.00	12/30/2004 17:15	
Beryllium	ND	0.00015	0.0010	mg/L	1.00	12/30/2004 17:15	
Cadmium	0.0015	0.00011	0.0010	mg/L	1.00	12/30/2004 17:15	
Chromium	0.023	0.00058	0.0020	mg/L	1.00	12/30/2004 17:15	
Cobalt	ND	0.00012	0.0020	mg/L	1.00	12/30/2004 17:15	
Copper	0.016	0.00014	0.0020	mg/L	1.00	12/30/2004 17:15	
Lead	0.0022	0.000098	0.0010	mg/L	1.00	12/30/2004 17:15	
Molybdenum	0.0065	0.00011	0.0020	mg/L	1.00	12/30/2004 17:15	
Nickel	0.013	0.00019	0.0020	mg/L	1.00	12/30/2004 17:15	
Selenium	ND	0.00054	0.0020	mg/L	1.00	12/30/2004 17:15	
Silver	ND	0.00012	0.0010	mg/L	1.00	12/30/2004 17:15	
Thallium	ND	0.00013	0.0020	mg/L	1.00	12/30/2004 17:15	
Vanadium	ND	0.0011	0.0020	mg/L	1.00	12/30/2004 17:15	
Zinc	0.054	0.00041	0.0020	mg/L	1.00	12/30/2004 17:15	

Metals - ICP/MS

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Project: E4L170439

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CA DHS ELAP# 2496

Prep(s): 3010A

Sample ID: FB-1-121604

12/16/2004 15:35

Sampled: Matrix:

Water

Test(s): 6020

Lab ID: 2

Extracted:

Received: 12/21/2004 10:10

ID: 2004-12-0731 - 56

12/22/2004 05:36

QC Batch#: 2004/12/22-01.67

Compound	Conc.	MDL	RL	Unit	Dilution	Analyzed	Flag
Antimony	ND	0.00011	0.0020	mg/L	1.00	12/30/2004 17:19	
Arsenic	ND	0.00083	0.0020	mg/L	1.00	12/30/2004 17:19	
Barium	ND	0.00013	0.0010	mg/L	1.00	12/30/2004 17:19	
Beryllium	ND	0.00015	0.0010	mg/L	1.00	12/30/2004 17:19	
Cadmium	ND	0.00011	0.0010	mg/L	1.00	12/30/2004 17:19	
Chromium	ND	0.00058	0.0020	mg/L	1.00	12/30/2004 17:19	
Cobalt	ND	0.00012	0.0020	mg/L	1.00	12/30/2004 17:19	
Copper	ND	0.00014	0.0020	mg/L	1.00	12/30/2004 17:19	
Lead	ND	0.000098	0.0010	mg/L	1.00	12/30/2004 17:19	
Molybdenum	ND	0.00011	0.0020	mg/L	1.00	12/30/2004 17:19	
Nickel	ND	0.00019	0.0020	mg/L	1.00	12/30/2004 17:19	j
Selenium	ND	0.00054	0.0020	mg/L	1.00	12/30/2004 17:19	
Silver	ND	0.00012	0.0010	mg/L	1.00	12/30/2004 17:19	
Thallium	ND	0.00013	0.0020	mg/L	1.00	12/30/2004 17:19	
Vanadium	ND	0.0011	0.0020	mg/L	1.00	12/30/2004 17:19	
Zinc	ND	0.00041	0.0020	mg/L	1.00	12/30/2004 17:19	

Metals - ICP/MS

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Project: E4L170439

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CA DHS ELAP# 2496

## **Batch QC Report**

Received: 12/21/2004 10:10

Prep(s): 3010A Method Blank

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MB: 2004/12/22-01.67-001

Water

Test(s): 6020 QC Batch # 2004/12/22-01.67

Date Extracted: 12/22/2004 05:36

Compou <b>n</b> d	Conc.	MDL	RL	Unit	Analyzed	Flag
Antimony	ND	0.000109	0.002	mg/L	12/30/2004 16:23	
Arsenic	ND	0.000832	0.002	mg/L	12/30/2004 16:23	
Barium	ND	0.000126	0.001	mg/L	12/30/2004 16:23	
Beryllium	ND	0.000145	0.001	mg/L	12/30/2004 16:23	
Cadmium	ND	0.000114	0.001	mg/L	12/30/2004 16:23	
Chromium	ND	0.000575	0.002	mg/L	12/30/2004 16:23	
Cobalt	ND	0.000117	0.002	mg/L	12/30/2004 16:23	
Copper	ND	0.000143	0.002	mg/L	12/30/2004 16:23	
Lead	ND	0.0000983	0.001	mg/L	12/30/2004 16:23	
Molybdenum	ND	0.000109	0.002	mg/L	12/30/2004 16:23	
Nickel	ND	0.000187	0.002	mg/L	12/30/2004 16:23	
Selenium	ND	0.000537	0.002	mg/L	12/30/2004 16:23	
Silver	ND	0.000119	0.001	mg/L	12/30/2004 16:23	
Thallium	ND	0.000130	0.002	mg/L	12/30/2004 16:23	
Vanadium	ND	0.00111	0.002	mg/L	12/30/2004 16:23	
Zinc	ND	0.000409	0.002	mg/L	01/04/2005 10:38	

Metals - ICP/MS

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Project: E4L170439

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CA DHS ELAP# 2496

## **Batch QC Report**

Received: 12/21/2004 10:10

Prep(s): 3050B Method Blank

MB: 2004/12/28-03.67-001

Soil

Test(s): 6020 QC Batch # 2004/12/28-03.67

Date Extracted: 12/28/2004 09:52

Compound	Conc.	MDL	RL	Unit	Analyzed	Flag
Antimony	ND	0.0139	0.2	mg/Kg	12/30/2004 01:35	
Arsenic	ND	0.0418	0.2	mg/Kg	12/30/2004 01:35	
Barium	ND	0.0141	0.1	mg/Kg	12/30/2004 01:35	
Beryllium	ND	0.0157	0.1	mg/Kg	12/30/2004 01:35	
Cadmium	ND	0.0117	0.1	mg/Kg	12/30/2004 01:35	
Chromium	ND	0.0395	0.2	mg/Kg	12/30/2004 01:35	
Cobalt	ND	0.0131	0.1	mg/Kg	12/30/2004 01:35	
Copper	ND	0.0151	0.2	mg/Kg	12/30/2004 01:35	
Lead	ND	0.0116	0.1	mg/Kg	12/30/2004 01:35	
Molybdenum	ND	0.0118	0.2	mg/Kg	12/30/2004 01:35	
Nickel	ND	0.0210	0.2	mg/Kg	12/30/2004 01:35	
Selenium	ND	0.0554	0.2	mg/Kg	12/30/2004 01:35	
Silver	ND	0.0145	0.1	mg/Kg	12/30/2004 01:35	
Thallium	ND	0.0151	0.1	mg/Kg	12/30/2004 01:35	
Vanadium	ND	0.0666	1.0	mg/Kg	12/30/2004 01:35	
Zinc	ND	0.0554	0.2	mg/Kg	12/30/2004 01:35	

Metals - ICP/MS

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Attn.: Sabina Sudoko 1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439 Received: 12/21/2004 10:10

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STL San Francisco 1220 Quarry Lane Pleasanton, CA 94566

Tel: (925) 484-1919 Fax: (925) 484-1096 www.stl-inc.com www.chromalab.com

CA DHS ELAP# 2496

Batch	QC	Re	oq	rt		
		-	_		 	

Prep(s): 3050B **Method Blank** MB: 2004/12/28-05.67-001

Soil

Test(s): 6020 QC Batch # 2004/12/28-05.67

Date Extracted: 12/28/2004 10:05

Compound	Conc.	MDL	RL	Unit	Analyzed	Flag
Antimony	ND	0.0139	0.2	mg/Kg	12/30/2004 17:39	
Arsenic	ND	0.0418	0.2	mg/Kg	12/30/2004 17:39	
Barium	ND	0.0141	0.1	mg/Kg	12/30/2004 17:39	
Beryllium	ND	0.0157	0.1	mg/Kg	12/30/2004 17:39	
Cadmium	ND	0.0117	0.1	mg/Kg	12/30/2004 17:39	
Chromium	ND	0.0395	0.2	mg/Kg	12/30/2004 17:39	
Cobalt	ND	0.0131	0.1	mg/Kg	12/30/2004 17:39	
Copper	ND	0.0151	0.2	mg/Kg	12/30/2004 17:39	
Lead	ND	0.0116	0.1	mg/Kg	12/30/2004 17:39	
Molybdenum	ND	0.0118	0.2	mg/Kg	12/30/2004 17:39	
Nickel	ND	0.0210	0.2	mg/Kg	12/30/2004 17:39	
Selenium	ND	0.0554	0.2	mg/Kg	12/30/2004 17:39	
Silver	ND	0.0145	0.1	mg/Kg	12/30/2004 17:39	
Thallium	ND	0.0151	0.1	mg/Kg	12/30/2004 17:39	
Vanadium	ND	0.0666	1.0	mg/Kg	12/30/2004 17:39	
Zinc	ND	0.0554	0.2	mg/Kg	12/30/2004 17:39	

Metals - ICP/MS

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Project: E4L170439

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CA DHS ELAP# 2496

## **Batch QC Report**

Received: 12/21/2004 10:10

Prep(s): 3050B Method Blank

MB: 2004/12/28-06.67-001

Soil

Test(s): 6020 QC Batch # 2004/12/28-06.67

Date Extracted: 12/28/2004 12:27

Compound	Conc.	MDL	RL	Unit	Analyzed	Flag
Antimony	ND	0.0139	0.2	mg/Kg	12/30/2004 20:33	
Arsenic	ND	0.0418	0.2	mg/Kg	12/30/2004 20:33	
Barium	ND	0.0141	0.1	mg/Kg	12/30/2004 20:33	
Beryllium	ND	0.0157	0.1	mg/Kg	12/30/2004 20:33	
Cadmium	ND	0.0117	0.1	mg/Kg	12/30/2004 20:33	
Chromium	ND	0.0395	0.2	mg/Kg	12/30/2004 20:33	
Cobalt	ND	0.0131	0.1	mg/Kg	12/30/2004 20:33	
Copper	ND	0.0151	0.2	mg/Kg	12/30/2004 20:33	
Lead	ND	0.0116	0.1	mg/Kg	12/30/2004 20:33	
Molybdenum	ND	0.0118	0.2	mg/Kg	12/30/2004 20:33	
Nickel	ND	0.0210	0.2	mg/Kg	12/30/2004 20:33	
Selenium	ND	0.0554	0.2	mg/Kg	12/30/2004 20:33	
Silver	ND	0.0145	0.1	mg/Kg	12/30/2004 20:33	
Thallium	ND	0.0151	0.1	mg/Kg	12/30/2004 20:33	
Vanadium	ND	0.0666	1.0	mg/Kg	12/30/2004 20:33	
Zinc	ND	0.0554	0.2	mg/Kg	12/30/2004 20:33	

Metals - ICP/MS

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Project: E4L170439

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CA DHS ELAP# 2496

## **Batch QC Report**

Received: 12/21/2004 10:10

Prep(s): 3050B **Method Blank** 

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MB: 2005/01/03-02.67-001

Soil

Test(s): 6020 QC Batch # 2005/01/03-02.67

Date Extracted: 01/03/2005 06:46

Compound	Conc.	MDL	RL	Unit	Analyzed	Flag
Antimony	ND	0.0139	0.2	mg/Kg	01/03/2005 14:46	
Arsenic	ND	0.0418	0.2	mg/Kg	01/03/2005 14:46	
Barium	ND	0.0141	0.1	mg/Kg	01/03/2005 14:46	
Beryllium	ND	0.0157	0.1	mg/Kg	01/03/2005 14:46	
Cadmium	ND	0.0117	0.1	mg/Kg	01/03/2005 14:46	
Chromium	ND	0.0395	0.2	mg/Kg	01/03/2005 14:46	
Cobalt	ND	0.0131	0.1	mg/Kg	01/03/2005 14:46	
Copper	ND	0.0151	0.2	mg/Kg	01/03/2005 14:46	
Lead	ND	0.0116	0.1	mg/Kg	01/03/2005 14:46	
Molybdenum	ND	0.0118	0.2	mg/Kg	01/03/2005 14:46	
Nickel	ND	0.0210	0.2	mg/Kg	01/03/2005 14:46	
Selenium	ND	0.0554	0.2	mg/Kg	01/03/2005 14:46	
Silver	ND	0.0145	0.1	mg/Kg	01/03/2005 14:46	
Thallium	ND	0.0151	0.1	mg/Kg	01/03/2005 14:46	
Vanadium	ND	0.0666	1.0	mg/Kg	01/03/2005 14:46	
Zinc	ND	0.0554	0.2	mg/Kg	01/03/2005 14:46	

Metals - ICP/MS

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Project: E4L170439

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CA DHS ELAP# 2496

## **Batch QC Report**

Received: 12/21/2004 10:10

Prep(s): 3010A Test(s): 6020

 Laboratory Control Spike
 Water
 QC Batch # 2004/12/22-01.67

 LCS
 2004/12/22-01.67-002
 Extracted: 12/22/2004
 Analyzed: 12/30/2004 16:26

 LCSD
 2004/12/22-01.67-003
 Extracted: 12/22/2004
 Analyzed: 12/30/2004 16:30

Compound	Conc.	mg/L	Exp.Conc.	Reco	very %	RPD	Ctrl.Lin	nits %	6 Flags	
•	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Antimony	0.103	0.104	0.1000	103.0	104.0	1.0	80-120	20		
Arsenic	0.103	0.103	0.1000	103.0	103.0	0.0	80-120	20		
Barium	0.104	0.104	0.1000	104.0	104.0	0.0	80-120	20		
Beryllium	0.109	0.108	0.1000	109.0	108.0	0.9	80-120	20		
Cadmium	0.102	0.104	0.1000	102.0	104.0	1.9	80-120	20		
Chromium	0.105	0.105	0.1000	105.0	105.0	0.0	80-120	20		
Cobalt	0.103	0.103	0.1000	103.0	103.0	0.0	80-120	20		}
Copper	0.103	0.103	0.1000	103.0	103.0	0.0	80-120	20		
Lead	0.105	0.105	0.1000	105.0	105.0	0.0	80-120	20		
Molybdenum	0.104	0.104	0.1000	104.0	104.0	0.0	80-120	20		
Nickel	0.102	0.102	0.1000	102.0	102.0	0.0	80-120	20		
Selenium	0.102	0.105	0.1000	102.0	105.0	2.9	80-120	20		
Silver	0.102	0.104	0.1000	102.0	104.0	1.9	80-120	20		
Thallium	0.106	0.107	0.1000	106.0	107.0	0.9	80-120	20		
Vanadium	0.104	0.103	0.1000	104.0	103.0	1.0	80-120	20		
Zinc	0.102	0.106	0.1000	102.0	106.0	3.8	80-120	20		

Metals - ICP/MS

STL Los Angeles

Attn.: Sabina Sudoko 1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439

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LABORATORY

STL San Francisco 1220 Quarry Lane Pleasanton, CA 94566

Tel: (925) 484-1919 Fax: (925) 484-1096 www.stl-inc.com www.chromalab.com

CA DHS ELAP# 2496

## **Batch QC Report**

Prep(s): 3050B Test(s): 6020

**Laboratory Control Spike** 

ike Soil

QC Batch # 2004/12/28-03.67

LCS 2004/12/28-03.67-002 LCSD 2004/12/28-03.67-003

Extracted: 12/28/2004 Extracted: 12/28/2004

Received: 12/21/2004 10:10

Analyzed: 12/30/2004 01:38 Analyzed: 12/30/2004 01:42

Compound	Conc.	mg/Kg	Exp.Conc.	Recov	very %	RPD	Ctrl.Lin	nits %	Fla	igs
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Antimony	4.94	4.81	5.00	98.8	96.2	2.7	80-120	20		
Arsenic	4.75	4.80	5.00	95.0	96.0	1.0	80-120	20		
Barium	5.07	4.88	5.00	101.4	97.6	3.8	80-120	20		
Beryllium	4.73	4.56	5.00	94.6	91.2	3.7	80-120	20		
Cadmium	5.00	4.83	5.00	100.0	96.6	3.5	80-120	20		
Chromium	5.20	5.09	5.00	104.0	101.8	2.1	80-120	20		
Cobalt	5.03	4.90	5.00	100.6	98.0	2.6	80-120	20		
Copper	5.06	4.85	5.00	101.2	97.0	4.2	80-120	20		
Lead	5.05	4.86	5.00	101.0	97.2	3.8	80-120	20		
Molybdenum	4.95	4.81	5.00	99.0	96.2	2.9	80-120	20		
Nickel	5.01	4.88	5.00	100.2	97.6	2.6	80-120	20		
Selenium	5.29	5.33	5.00	105.8	106.6	0.8	80-120	20		
Silver	5.20	5.04	5.00	104.0	100.8	3.1	80-120	20		
Thallium	4.80	4.63	5.00	96.0	92.6	3.6	80-120	20		
Vanadium	4.88	4.58	5.00	97.6	91.6	6.3	80-120	20		
Zinc	4.96	4.83	5.00	99.2	96.6	2.7	80-120	20		

Metals - ICP/MS

STL Los Angeles

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Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439

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CA DHS ELAP# 2496

# **Batch QC Report**

Received: 12/21/2004 10:10

Prep(s): 3050B Test(s): 6020

 Laboratory Control Spike
 Soil
 QC Batch # 2004/12/28-05.67

 LCS
 2004/12/28-05.67-007
 Extracted: 12/28/2004
 Analyzed: 01/04/2005 17:43

 LCSD
 2004/12/28-05.67-008
 Extracted: 12/28/2004
 Analyzed: 01/04/2005 17:46

Compound	Conc.	mg/Kg	Exp.Conc.	Recov	ery %	RPD	Ctrl.Lim	nits %	Fla	ags
•	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Antimony	5.06	5.09	5.00	101.2	101.8	0.6	80-120	20		
Arsenic	5.09	5.12	5.00	101.8	102.4	0.6	80-120	20		
Barium	5.04	5.02	5.00	100.8	100.4	0.4	80-120	20		
Beryllium	5.06	5.13	5.00	101.2	102.6	1.4	80-120	20		
Cadmium	NA	50.6	5.00	0.0	1012.0		80-120	20		
Chromium	NA	5.15	5.00	0.0	103.0		80-120	20		
Cobalt	5.09	5.14	5.00	101.8	102.8	1.0	80-120	20		
Copper	5.13	5.17	5.00	102.6	103.4	0.8	80-120	20		
Lead	5.04	5.03	5.00	100.8	100.6	0.2	80-120	20		
Molybdenum	5.04	NA	5.00	100.8	0.0		80-120	20		
Nickel	5.11	5.17	5.00	102.2	103.4	1.2	80-120	20		
Selenium	5.09	5.11	5.00	101.8	102.2	0.4	80-120	20		
Silver	5.00	5.03	5.00	100.0	100.6	0.6	80-120	20		
Thallium	5.10	5.16	5.00	102.0	103.2	1.2	80-120	20		
Vanadium	5.05	5.08	5.00	101.0	101.6	0.6	80-120	20		
Zinc	5.10	5.14	5.00	102.0	102.8	0.8	80-120	20		

Metals - ICP/MS

STL Los Angeles

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Attn.: Sabina Sudoko 1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

2004/12/28-06.67-002

2004/12/28-06.67-003

Project: E4L170439

LCS

LCSD

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CA DHS ELAP# 2496

## **Batch QC Report**

Prep(s): 3050B

**Laboratory Control Spike** 

ol Spike Soil

Extracted: 12/28/2004

Extracted: 12/28/2004 Extracted: 12/28/2004

Received: 12/21/2004 10:10

QC Batch # 2004/12/28-06.67

Analyzed: 12/30/2004 20:37 Analyzed: 12/30/2004 20:41

Compound	Conc.	mg/Kg	Exp.Conc.	Reco	very %	RPD	Ctrl.Lin	nits %	% Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Antimony	5.03	5.11	5.00	100.6	102.2	1.6	80-120	20		
Arsenic	5.08	5.08	5.00	101.6	101.6	0.0	80-120	20		
Barium	5.14	5.12	5.00	102.8	102.4	0.4	80-120	20		
Beryllium	5.10	5.19	5.00	102.0	103.8	1.7	80-120	20		
Cadmium	5.05	5.13	5.00	101.0	102.6	1.6	80-120	20		
Chromium	5.20	5.17	5.00	104.0	103.4	0.6	80-120	20		
Cobalt	5.13	5.13	5.00	102.6	102.6	0.0	80-120	20		
Copper	5.11	5.14	5.00	102.2	102.8	0.6	80-120	20		
Lead	5.13	5.08	5.00	102.6	101.6	1.0	80-120	20		
Molybdenum	5.12	5.21	5.00	102.4	104.2	1.7	80-120	20		
Nickel	5.14	5.13	5.00	102.8	102.6	0.2	80-120	20		
Selenium	5.03	5.05	5.00	100.6	101.0	0.4	80-120	20		
Silver	5.11	5.13	5.00	102.2	102.6	0.4	80-120	20		
Thallium	5.17	5.18	5.00	103.4	103.6	0.2	80-120	20		
Vanadium	5.38	5.18	5.00	107.6	103.6	3.8	80-120	20		
Zinc	5.05	5.06	5.00	101.0	101.2	0.2	80-120	20		

Metals - ICP/MS

STL Los Angeles

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Project: E4L170439

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CA DHS ELAP# 2496

## **Batch QC Report**

Prep(s): 3050B

Test(s): 6020

**Laboratory Control Spike** 

Soil

QC Batch # 2005/01/03-02.67

LCS 2005/01/03-02.67-002 LCSD 2005/01/03-02.67-003

Extracted: 01/03/2005 Extracted: 01/03/2005

Received: 12/21/2004 10:10

Analyzed: 01/03/2005 14:49 Analyzed: 01/03/2005 14:52

Compound	Conc.	mg/Kg	Exp.Conc.	Reco	very %	RPD	RPD Ctrl.Lim		Fla	ags		
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD		
Antimony	4.95	5.14	5.00	99.0	102.8	3.8	80-120	20				
Arsenic	5.14	5.10	5.00	102.8	102.0	0.8	80-120	20				
Barium	5.21	5.04	5.00	104.2	100.8	3.3	80-120	20				
Beryllium	5.09	5.06	5.00	101.8	101.2	0.6	80-120	20				
Cadmium	5.10	5.09	5.00	102.0	101.8	0.2	80-120	20				
Chromium	5.59	5.22	5.00	111.8	104.4	6.8	80-120	20				
Cobalt	5.23	5.19	5.00	104.6	103.8	0.8	80-120	20				
Copper	5.21	5.16	5.00	104.2	103.2	1.0	80-120	20				
Lead	5.13	5.08	5.00	102.6	101.6	1.0	80-120	20				
Molybdenum	5.17	5.24	5.00	103.4	104.8	1.3	80-120	20				
Nickel	5.24	5.20	5.00	104.8	104.0	0.8	80-120	20				
Selenium	4.96	4.98	5.00	99.2	99.6	0.4	80-120	20				
Silver	5.11	5.15	5.00	102.2	103.0	0.8	80-120	20				
Thallium	5.14	5.14	5.00	102.8	102.8	0.0	80-120	20				
Vanadium	5.20	5.19	5.00	104.0	103.8	0.2	80-120	20				
Zinc	5.06	4.97	5.00	101.2	99.4	1.8	80-120	20				

Metals - ICP/MS

STL Los Angeles

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2004/12/28-05.67-005

2004/12/28-05.67-006

Project: E4L170439

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CA DHS ELAP# 2496

## **Batch QC Report**

Prep(s): 3050B Test(s): 6020

Matrix Spike ( MS / MSD ) Soil QC Batch # 2004/12/28-05.67

DP-3-5 >> MS

MS:

MSD:

Extracted: 12/28/2004 Analized:

2004-12-0731 - 014

Received: 12/21/2004 10:10

12/30/2004 18:25

Dilution:

Lab ID:

10.00

Extracted: 12/28/2004

Analized: 12/30/2004 18:28

Dilution:

10.00

Compound	Conc.	mç	g/Kg	Spk.Level	R	ecovery	%	Limits	%	Flags	
•	MS	MSD	Sample	mg/Kg	MS	MSD	RPD	Rec.	RPD	MS	MSD
Antimony	3.83	4.06	ND	5.00	76.6	82.9	7.9	75-125	20		
Arsenic	5.75	5.59	ND	5.00	115.0	114.1	0.8	75-125	20		
Barium	56.4	56.5	50.0	5.00	128.0	132.7	3.6	75-125	20	М3	МЗ
Beryllium	5.18	5.20	ND	5.00	103.6	106.1	2.4	75-125	20		
Cadmium	5.15	5.04	ND	5.00	103.0	102.9	0.1	75-125	20		
Chromium	10.0	9.17	3.93	5.00	121.4	106.9	12.7	75-125	20		
Cobalt	8.35	8.05	2.93	5.00	108.4	104.5	3.7	75-125	20		
Copper	10.9	11.2	5.74	5.00	103.2	111.4	7.6	75-125	20		
Lead	6.47	6.21	1.24	5.00	104.6	101.4	3.1	75-125	20		
Molybdenum	5.43	5.16	0.383	5.00	100.9	97.5	3.4	75-125	20		
Nickel	11.1	8.65	4.13	5.00	139.4	92.2	40.8	75-125	20	M4	R2
Selenium	4.54	4.46	ND	5.00	90.8	91.0	0.2	75-125	20		
Silver	5.18	5.10	ND	5.00	103.6	104.1	0.5	75-125	20		
Thallium	4.99	4.89	ND	5.00	99.8	99.8	0.0	75-125	20		
Vanadium	17.2	17.7	11.7	5.00	110.0	122.4	10.7	75-125	20		
Zinc	25.1	24.5	19.2	5.00	118.0	108.2	8.7	75-125	20		

Metals - ICP/MS

STL Los Angeles

Attn.: Sabina Sudoko 1721 South Grand Avenue Santa Ana, CA 92705

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2004/12/28-06.67-005

2004/12/28-06.67-006

Project: E4L170439

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CA DHS ELAP# 2496

## **Batch QC Report**

Prep(s): 3050B Test(s): 6020

Matrix Spike ( MS / MSD ) Soil QC Batch # 2004/12/28-06.67

DP-6-15 >> MS

MS:

MSD:

eser.

Future at a 4. 40/00/0004

Extracted: 12/28/2004

Lab ID: 2004-12-0731 - 034

Extracted: 12/28/2004

Analized:

Received: 12/21/2004 10:10

12/30/2004 20:48

Dilution:

10.00

Analized:

12/30/2004 20:52

Dilution:

10.00

Compound	Conc.	Conc. mg		Spk.Level	Recovery %			Limits %		Flags	
	MS	MSD	Sample	mg/Kg	MS	MSD	RPD	Rec.	RPD	MS	MSD
Antimony	3.54	3.81	ND	4.76	74.4	78.6	5.5	75-125	20	M5	
Arsenic	5.29	5.44	0.571	4.76	99.1	100.4	1.3	75-125	20		
Barium	40.0	37.0	36.0	4.76	84.0	20.6	121.	75-125	20		МЗ
Beryllium	4.96	5.03	0.116	4.76	101.8	101.3	0.5	75-125	20		
Cadmium	4.87	4.88	ND	4.76	102.3	100.6	1.7	75-125	20		
Chromium	7.88	7.97	4.08	4.76	79.8	80.2	0.5	75-125	20		
Cobalt	7.23	7.39	2.20	4.76	105.7	107.0	1.2	75-125	20		
Copper	11.0	10.2	5.90	4.76	107.1	88.7	18.8	75-125	20		
Lead	6.29	6.16	1.32	4.76	104.4	99.8	4.5	75-125	20		
Molybdenum	4.77	4.91	0.248	4.76	95.0	96.1	1.2	75-125	20		
Nickel	7.84	7.99	3.35	4.76	94.3	95.7	1.5	75-125	20		
Selenium	4.32	4.30	ND	4.76	90.8	88.7	2.3	75-125	20		
Silver	4.81	4.89	ND	4.76	101.1	100.8	0.3	75-125	20		
Thallium	4.51	4.60	ND	4.76	94.7	94.8	0.1	75-125	20		
Vanadium	14.8	16.0	9.82	4.76	104.6	127.4	19.7	75-125	20		M4
Zinc	20.2	20.1	17.3	4.76	60.9	57.7	5.4	75-125	20	M5	M5

Metals - ICP/MS

STL Los Angeles

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Project: E4L170439

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CA DHS ELAP# 2496

## **Batch QC Report**

Prep(s): 3050B Test(s): 6020

Matrix Spike ( MS / MSD ) Soil QC Batch # 2005/01/03-02.67

Extracted: 01/03/2005

DP-9-25 >> MS

2005/01/03-02.67-005

2005/01/03-02.67-006

MS:

MSD:

Carrie

Lab ID: 2004-12-0731 - 054

Received: 12/21/2004 10:10

Extracted: 01/03/2005 Analized:

01/03/2005 14:59

Dilution:

10.00

Analized:

01/03/2005 15:17

Dilution:

10.00

Compound	Conc.		ng/Kg	Spk.Level	Recovery %			Limits %		Flags	
	MS	MSD	Sample	mg/Kg	MS	MSD	RPD	Rec.	RPD	MS	MSD
Antimony	4.42	4.40	0.282	4.81	86.0	84.0	2.4	75-125	20		
Arsenic	5.66	5.92	ND	4.81	117.7	120.8	2.6	75-125	20		
Barium	41.2	39.6	34.5	4.81	139.3	104.1	28.9	75-125	20	МЗ	мз
Beryllium	5.61	5.67	0.117	4.81	114.2	113.3	0.8	75-125	20		
Cadmium	5.50	5.68	ND	4.81	114.3	115.9	1.4	75-125	20		
Chromium	10.6	10.6	5.69	4.81	102.1	100.2	1.9	75-125	20		
Cobalt	7.43	7.46	2.34	4.81	105.8	104.5	1.2	75-125	20		
Copper	10.2	9.54	4.48	4.81	118.9	103.3	14.0	75-125	20		
Lead	6.34	6.29	1.02	4.81	110.6	107.6	2.7	75-125	20		
Molybdenum	5.37	5.46	0.363	4.81	104.1	104.0	0.1	75-125	20		
Nickel	9.24	9.08	4.00	4.81	108.9	103.7	4.9	75-125	20		
Selenium	6.89	6.52	2.36	4.81	94.2	84.9	10.4	75-125	20		
Silver	5.16	5.27	ND	4.81	107.3	107.6	0.3	75-125	20		
Thallium	4.82	4.79	0.105	4.81	98.0	95.6	2.5	75-125	20		
Vanadium	15.1	14.1	9.07	4.81	125.4	102.7	19.9	75-125	20	M4	
Zinc	22.8	21.0	14.0	4.81	183.0	142.9	24.6	75-125	20	M4	M4

Metals - ICP/MS

STL Los Angeles

Attn.: Sabina Sudoko 1721 South Grand Avenue Santa Ana, CA 92705

Phone: (714) 258-8610 Fax: (714) 258-0921

Project: E4L170439

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CA DHS ELAP# 2496

## **Legend and Notes**

Received: 12/21/2004 10:10

## **Analysis Flag**

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## Result Flag

J2

Estimated value, less than reporting limits, but over the method

detection limits.

МЗ

Sample > 4x spike concentration.

M4

MS/MSD spike recoveries were above acceptance limits.

See blank spike (LCS).

M5

MS/MSD spike recoveries were below acceptance limits.

See blank spike (LCS).

R2

Analyte RPD was out of QC limits due to sample heterogeneity.

SE0-21-H002

SEVERN TREZI

Severn Trent Laboratories, Inc.

Special Instructions/ Conditions of Receipt (A foy may be assessed if samples are retained tonger than 1 month) 3 96850 Page 900 Analysis (Allach list if more space is needed ☐ Archive For Months O Corposal By Lab Containers & Preservatives HOM 3. Haceived By IOH EONH OSZH C Passon B Cunknown C Return To Chann 105 Turne 190 Matrix Carrent/Vayusi Number pas 1) tail 8 8 80 12 0 S857 0733 080 0830 0815 7200 0842 0903 C830 A DO A Š Date 380 Time Oake Contamers for each sample may be combined on one line). Skin mitant Sample I.D. No. and Description 7.0% ☐ Flammable Contract/Purchase Order/Duste Ac ☐ 48 Hours Possible Hazard Identification Turn Around Time Required Non-Hazard f Returnation By 2 Retinguished By 3 Rehmannished By \ \_ STL-4124 (0901) STORE | Comments

DISTRIBUTION: WHITE Returned to Cheminy Report, CANARY Stays with the Sample PINK - Field Copy

Custody Record 2104-12 - 073 |

Source Trong

TRENT STL
Severn Trent Laboratories, Inc.

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Special Instructions/ Conditions of Receipt Chain of Custody Number 181215 (A fee may be assessed it samples are relained Months (Anger tran ) month) 'n 1878 Cate Analysis (Attach list if Lab Number Dane Anchive Fox U 0000) SW/DI 1 Received By Objected By Lab C., CC Redurements (Specify) HOMY Containers & Preservatives HOPN 3 Received By Ľ) Telephone Number (Area Code)/Fax Number CONH HSBOA saidur. Sample Dispose MP5 Matrix Carrier Waybill Number E CL pas Site Contact 0 अस् 2045 700 600 Time 85 1212 12-16-01 10800 ०४। 2 2 Date % = % 7 ☐ 21 Days Poison B Date State Ze Code Containers for each sample may be combined on one line) Skin unitant Contract Purchase Order Optole No. Sample I.D. No. and Description 1881 U C Flammable Proposi Name and Location (State) D-4-30 \* HOW! Possible Hazard Identification Turn Around Trate Required 37-h-1 101 3 Rennequenced By ☐ Non-Hazard STL-4124 (0901) Client Relinguis Adorass ते

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SEVERN TRENT

Severn Trent Laboratories, Inc.

96850

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Special Instructions/ Conditions of Receipt (A fee may be assessed if samples are retained tomings than I month) Time B Date Analysis (Attach list If more space is needed) Lab Number Care Tanchine For do OC Requirements (Specify) HOPA Containers & Preservatives Olgudeal By Late HOM Rocaliga By 3 Racewerd By 1,74 Telaphone Number (Area Code)/Fax Number EONH Lato Combici म्यङ्ग south. × O Rutum & Chant Sample Disposar Matrix Lime Carrent Wayon Number pag. Project Manager 12200 Site Contact Chimown 623 050 1320 100 公元 3 339 Time Date <u>8</u> -1327 (1) (1) (1) O 21 Days Poison B ること Date Zu Code Containers for each sample may be combined on one line) Project Name and Localism State) 76439 Sken fraffant の対数 Sample LD. No. and Description Frammatin Contract/Purchase Order/Quote No □ 48 Hours Odsable Hazard Identification والم Myn. Huzard Efar 3 Retinquished By STL-4124 (3901) Chent Sa Majira Comments Address 3

Sto - 21-1000

SEVERN TRENT

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Severn Trent Laboratories, Inc.

Special Instructions/ Conditions of Receipt 96850 Time 03/20 Analysis (Attach list if Lab Number Date. A Proposal By Lab Archive For OC Requirements (Specify) WACH ZOMO Contamers & Preservatives Sespons By Lab HOWN 3 Received By 134 Telephone Number (Area Code)/Fax.Number LAD CONTRET CONH POŚZH ☐ Posson B V Unknown ☐ Return To Clean Sample Disposal MEN Mafnx Carrier/Wayort Number Times. pos Site Contact Date Oner \_ 1402 102 **あか** 046 1280 533 158S Time 五万 <u>8</u> KX3 38 Oafe 7 7 7 O 2' Cays 2-16-04 Date State Zp Code 14 Clays Sample LD. No. and Description (Containers for each sample may be combined on one line) Skin (mitant Proposition Name and Legithorn (State) 100 ☐ Flammable As Hours ossible Hazard Identification Turn Around Time Required るし 3 Resunquished By 2 Rollmoushed By STL-4124 (0601) Address à

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SEVERN TRENT

Severn Trent Laboratories, Inc.

Special Instructions/ Conditions of Receipt 96850 8 (A fee may be assessed if samplins are retained
Months Achige (han 1 mealth) 18121 E S Page. Care Analysis (Attach list if more space is needed, Lab Number Date ☐ Archive For 5141 GC Requirements (Specify) HOPN Containers & Preservatives HOPN 2 Received By Receipted By 3. Received By CH. Telephone Number (Area Cade)/Fax Number Lab Contact ECHIH MOSZH Z Unknown | | Renum to Chem Sample Disposal NOS Camer Waybul Number Matrix Three TO THE STATE OF TH pag Project Manager COMO Site Contact 1503 荔 300 一次 **公** Time 1451 100 1828 Date 日本日本 12-16-01 Poison B Dafe Zip Code □ 12 Days Sample LD. No. and Description Contemes for each sample may be combined on one lines Skin Imitant State C Klays ☐ Flammable Conract/Purchase Order/Duoke No Project Name and Location (State) T 48 Hours Possible Hazard Identification Twn Anund Time Required ١ ₽- 2-Repriquished By 3. Reinquished By ☐ Nort-Hazard ST. 4124 (0901) Chan! Address Penny हैं

OISTRIBUTION: WHITE Returned to Client with Report. CANARY: Stays with the Samplin, PINK: Field Claps

Sovements

## Shaw Environmental, Inc

## Client Sample ID: DP-1-1

## General Chemistry

Lot-Sample #...: E4L170439-001 Work Order #...: G1EQN Matrix.....: S0

Date Sampled...: 12/16/04 07:19 Date Received..: 12/16/04 19:40

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F. ..

PARAMETER Hexavalent	RESULT 5.7	RL 0.40	UNITS mg/kg	METHOD SW846 7199	····	PREPARATION- ANALYSIS DATE 01/13-01/14/05	PREP <u>BATCH #</u> <b>5013365</b>	
Chromium		Dilution Factor: 1 Instrument ID: W18		Analysis Time: 1 MS Run # 5		Analyst ID		

### Shaw Environmental, Inc

### Client Sample ID: DP-1-5

### General Chemistry

Lot-Sample #...: E4L170439-002 Work Order #...: G1ERC Matrix.....: SO

Date Sampled...: 12/16/04 07:53 Date Received..: 12/16/04 19:40

PREPARATION-PREP PARAMETER UNITS RESULT RL METHOD ANALYSIS DATE BATCH # Hexavalent 0.99 SW846 7199 01/13-01/14/05 5013365 mg/kg Chromium Dilution Factor: 1 Analysis Time..: 15:15 Analyst ID....: 0000224 Instrument ID..: W18 MS Run #..... 5013224 MDL..... 0.20

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#### Client Sample ID: DP-1-10

#### General Chemistry

Lot-Sample #...: E4L170439-003 Work Order #...: G1ERJ Matrix....: SO

Date Sampled...: 12/16/04 08:00 Date Received..: 12/16/04 19:40

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PREPARATION-PREP <u>RESU</u>LT METHOD PARAMETER UNITS ANALYSIS DATE BATCH # RL **Hexavalent** 01/13-01/14/05 5013365 1.6 SW846 7199 Chromium Dilution Factor: 1 Analysis Time..: 15:34 Analyst ID....: 0000224

MS Run #....: 5013224 MDL..... 0.20 Instrument ID..: W18

# Client Sample ID: DP-2-1

# General Chemistry

Lot-Sample #...: E4L170439-007 Work Order #...: G1ER1 Matrix.....: SO

Date Sampled...: 12/16/04 07:47 Date Received..: 12/16/04 19:40

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Hexavalent Chromium	0.43	0.40	mg/kg	SW846 7199	01/13-01/14/05	5013365
	Di	lution Fac	tor: 1	Analysis Time: 15:53	Analyst ID	: 0000224
	In	strument I	D: W18	MS Run #: 50132	224 MDL	.: 0.20

# Client Sample ID: DP-2-5

# General Chemistry

Lot-Sample #...: E4L170439-008 Work Order #...: G1ER2 Matrix.....: SO

Date Sampled...: 12/16/04 08:37 Date Received..: 12/16/04 19:40

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PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION ANALYSIS DA	
Hexavalent Chromium	ND	0.40	mg/kg	SW846 7199	01/13-01/14	/05 5013365
	Di	lution Fac	tor: 1	Analysis Time: 16	3:13 Analyst ID.	: 0000224
	In	strument I	D: W18	MS Run #: 50	013224 MDL	: 0.20

## Client Sample ID: DP-3-1

# General Chemistry

Lot-Sample #...: E4L170439-013 Work Order #...: G1ETQ Matrix.....: SO

Date Sampled...: 12/16/04 08:06 Date Received..: 12/16/04 19:40

PREPARATION-PREP RESULT PARAMETER METHOD UNITS RL ANALYSIS DATE BATCH # Hexavalent ND SW846 7199 mg/kg 01/13-01/14/05 5013365 Chromium Dilution Factor: 1 Analysis Time..: 16:51 Analyst ID....: 0000224

Instrument ID.:: W18 MS Run #.....: 5013224 MDL....... 0.20

Client Sample ID: DP-3-5

# General Chemistry

Lot-Sample #...: E4L170439-014 Work Order #...: G1ETR Matrix.....: SO

Date Sampled...: 12/16/04 09:40 Date Received..: 12/16/04 19:40

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PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- PREP ANALYSIS DATE BATCH #
Hexavalent Chromium	ND	0.40	mg/kg	SW846 7199	01/13-01/14/05 5013365
	D	lution Fac	tor: 1	Analysis Time: 17:1	0 Analyst ID: 0000224
	Ir	strument I	D: W18	MS Run #: 5013	224 MDL 0.20

Client Sample ID: DP-3-10

#### General Chemistry

Lot-Sample #...: E4L170439-015 Work Order #...: G1ET0 Matrix.....: SO

Date Sampled...: 12/16/04 09:45 Date Received..: 12/16/04 19:40

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PREPARATION-PREP PARAMETER RESULT UNITS METHOD RL ANALYSIS DATE BATCH # Hexavalent 17.2 SW846 7199 01/13-01/18/05 5013365 Chromium Dilution Factor: 5 Analysis Time..: 09:58 Analyst ID....: 0000224

Instrument ID.:: W01 MS Run #.....: 5013224 MDL.....: 1.0

## Client Sample ID: DP-3-15

## General Chemistry

Lot-Sample #...: E4L170439-016 Work Order #...: G1ET3 Matrix....: SO

Date Sampled...: 12/16/04 09:51 Date Received..: 12/16/04 19:40

PREPARATION-PREP PARAMETER ANALYSIS DATE BATCH # RESULT RLUNITS METHOD Hexavalent 2.0 0.40 mg/kg SW846 7199 01/13-01/18/05 5013365 Chromium

Dilution Factor: 1 Analysis Time..: 09:19 Analyst ID....: 0000224

Instrument ID..: W18 MS Run #....: 5013224 MDL..... 0.20

#### Client Sample ID: DP-4-1

# General Chemistry

Lot-Sample #...: E4L170439-019 Work Order #...: G1EVD Matrix.....: SO

Date Sampled...: 12/16/04 08:19 Date Received..: 12/16/04 19:40

 PARAMETER
 RESULT
 RL
 UNITS
 METHOD
 ANALYSIS DATE
 BATCH #

 Hexavalent Chromium
 34.0
 2.0
 mg/kg
 SW846 7199
 01/13-01/15/05
 5013365

Instrument ID.:: W18 MS Run #.....: 5013224 MDL.....: 1.0

# Client Sample ID: DP-4-5

# General Chemistry

Lot-Sample #...: E4L170439-020 Work Order #...: G1EVF Matrix.....: S0

Date Sampled...: 12/16/04 11:41 Date Received..: 12/16/04 19:40

					PREPARATION-	PREP
PARAMETER	RESULT	RL	UNITS	METHOD	ANALYSIS DATE	BATCH #
Hexavalent Chromium	ND	0.40	mg/kg	SW846 7199	01/13-01/14/05	5013365
	Di	lution Fac	tor: 1	Analysis Time: 18:47	Analyst ID	: 0000224

Instrument ID.:: W18 MS Run #.....: 5013224 MDL......... 0.20

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## Client Sample ID: DP-4-10

# General Chemistry

Lot-Sample #...: E4L170439-021 Work Order #...: G1EVG Matrix.....: SO

Date Sampled...: 12/16/04 11:46 Date Received..: 12/16/04 19:40

 PARAMETER
 RESULT
 RL
 UNITS
 METHOD
 ANALYSIS
 DATE
 BATCH #

 Hexavalent
 ND
 0.40
 mg/kg
 SW846 7199
 01/13-01/14/05
 5013365

 Chromium
 Chro

 Dilution Factor: 1
 Analysis Time..: 19:06
 Analyst ID....: 0000224

 Instrument ID..: W18
 MS Run #.....: 5013224
 MDL......: 0.20

## Client Sample ID: DP-4-15

#### General Chemistry

Lot-Sample #...: E4L170439-022 Work Order #...: G1EVJ Matrix.....: S0

Date Sampled...: 12/16/04 11:50 Date Received..: 12/16/04 19:40

PREPARATION-PREP PARAMETER RESULT UNITS METHOD ANALYSIS DATE BATCH # RLSW846 7199 Hexavalent ND mg/kg 01/13-01/14/05 5013365 Chromium Dilution Factor: 1 Analysis Time..: 19:25 Analyst ID....: 0000224

Instrument ID.:: W18 MS Run #.....: 5013224 MDL....... 0.20

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Client Sample ID: DP-4-20

#### General Chemistry

Lot-Sample #...: E4L170439-023 Work Order #...: G1EVK Matrix..... SO

Date Sampled...: 12/16/04 11:58 Date Received..: 12/16/04 19:40

PREPARATION-PREP PARAMETER <u>RESU</u>LT METHOD RLUNITS ANALYSIS DATE BATCH # Hexavalent ND 0.40 mg/kg SW846 7199 01/13-01/14/05 5013365 Chromium

Dilution Factor: 1 Analysis Time..: 19:44 Analyst ID....: 0000224

Instrument ID..: W18 MS Run #....: 5013224 MDL..... 0.20

#### Client Sample ID: DP-4-25

## General Chemistry

Lot-Sample #...: E4L170439-024 Work Order #...: G1EVL Matrix..... so

Date Sampled...: 12/16/04 12:12 Date Received..: 12/16/04 19:40

PREPARATION-PREP PARAMETER METHOD RESULT RL UNITS ANALYSIS DATE BATCH # Hexavalent ND 0.40 mg/kg SW846 7199 01/13-01/14/05 5013365 Chromium

> Dilution Factor: 1 Analysis Time..: 20:04 Analyst ID....: 0000224

Instrument ID..: W18 MS Run #....: 5013224 MDL..... 0.20

#### Client Sample ID: BG-1-10

# General Chemistry

Lot-Sample #...: E4L190115-008 Work Order #...: G1GTJ Matrix.....: S0

Date Sampled...: 12/17/04 07:36 Date Received..: 12/17/04 18:45

PREPARATION-PREP PARAMETER METHOD RESULT RLUNITS ANALYSIS DATE BATCH # Hexavalent ND 0.40 mg/kg SW846 7199 01/13-01/14/05 5013365 Chromium Dilution Factor: 1 Analysis Time..: 20:42 Analyst ID....: 000022 Instrument ID..: W18 MS Run #....: 5013224 MDL..... 0.20

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#### Client Sample ID: BG-2-1

#### General Chemistry

Lot-Sample #...: E4L190115-015 Work Order #...: G1GTR Matrix.....: S0

Date Sampled...: 12/17/04 08:44 Date Received..: 12/17/04 18:45

PREPARATION-PREP PARAMETER METHOD RESULT UNITS ANALYSIS DATE BATCH # Hexavalent ND mg/kg SW846 7199 01/13-01/14/05 5013365 Chromium Dilution Factor: 1 Analysis Time..: 21:01 Analyst ID....: 0000224

Instrument ID.:: W18 MS Run #.....: 5013224 MDL......... 0.20

## Client Sample ID: BG-2-10

# General Chemistry

Lot-Sample #...: E4L190115-016 Work Order #...: G1GTT Matrix.....: SO

Date Sampled...: 12/17/04 08:52 Date Received..: 12/17/04 18:45

					PREPARATION-	PREP
PARAMETER	RESULT	RL	UNITS	METHOD	ANALYSIS DATE	BATCH #
Hexavalent Chromium	ND	0.40	mg/kg	SW846 7199	01/13-01/14/05	5013365

Dilution Factor: 1 Analysis Time..: 21:21 Analyst ID....: 0000224

Instrument ID..: W18 MS Run #.....: 5013224 MDL........... 0.20

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# California Regional Water Quality Control Board

# Los Angeles Region



Alan C. Lloyd, Ph.D.
Agency Secretary

Recipient of the 2001 Environmental Leadership Award from Keep California Beautiful

320 W. 4th Street, Suite 200, Los Angeles, California 90013

Phone (213) 576-6600 FAX (213) 576-6640 - Internet Address: http://www.waterboards.ca.gov/losangeles

Arnold Schwarzenegger
Governor

March 16, 2005

Hawker Pacific Aerospace c/o Mr. Brian Carr 11240 Sherman Way Sun Valley, California 91352

The Basinger Trusts

FX-6 Personal Privacy

The Wagner Trusts c/o Mrs. Peggy Wagner

# FX-6 Personal Privacy

NO FURTHER REQUIREMENTS - HAWKER PACIFIC AEROSPACE 11240 SHERMAN WAY, SUN VALLEY, CALIFORNIA (FILE NO. 111.0436)

Dear Mr. Carr, Mr. Basinger and Mrs. Wagner,

California Regional Water Quality Control Board, Los Angeles Region, ("Regional Board") staff have reviewed the January 28, 2005 final technical report prepared by Shaw Environmental & Infrastructure, Inc. We note that some of the soil samples obtained from the site exceed the California-modified preliminary remediation goal (PRG) [industrial land use] for arsenic of 0.25 milligrams per kilogram (mg/kg). The maximum concentration of arsenic detected at your site was 10.0 mg/kg.

However, a scientific study of conducted in cooperation with the University of California titled, "Background Concentrations of Trace and Major Elements in California Soils" (Kearney Foundation of Soil Science Special Report, 1996 [Kearney Report]), indicates that background concentrations of naturally occurring arsenic averages 3.5 mg/kg in the native soils of California. In perspective, this concentration is an order of magnitude greater than the California PRG.

Additionally, a 2002 study prepared by the California Environmental Protection Agency-Department of Toxic Substance Control (Cal EPA-DTSC) of heavy metal soil concentrations at 19 Los Angeles Unified School District (LAUSD) sites concluded with the determination that levels as high as 11.3 mg/kg would not require remedial action or land use restriction for the LAUSD.

# California Environmental Protection Agency

Recycled Paper

Mr. Carr, Basinger and Wagner Trusts -2 -Hawker Pacific Facility, North Hollywood, California

March 16, 2005

Therefore, based upon the Kearney Report and Cal EPA-DTSC study, and because of natural background assence levels in soils of the San Fernando Valley in this range, this Regional Board will not require further remediation or impose a land use restriction on the subject property. Based on the observations made by Regional Board staff during the soil investigation, and provided that the aforementioned report submitted to this Board is accurate and representative of site conditions, no further requirements need be met with respect to this Regional Board's heavy metals investigation in San Fernando Valley.

It should be noted that this letter in no way releases you from responsibility regarding other chemicals or releases to the environment from your property during your occupancy. Additionally, the jurisdiction requirements of other agencies, such as the United States Environmental Protection Agency (USEPA), and/or the Cal EPA-DTSC, are not affected by this Regional Board's "no further requirements" determination. Such agencies may choose to make their own determination concerning the Site.

If you have any questions regarding this matter, please call Mr. Dixon Oriola at (213) 576-6803; or Mr. Alex Lapostol at (213) 576-6807.

Sincerelly.

Executive Officer

c¢;

Mr. Leighton Fong, City of Glendale

Mr. Mark Mackowski, Upper Los Angeles River Area Watermaster

Mr. Thomas Erh, Los Angeles Department of Water & Power

Mr. David Stensby, USEPA Superfund Division, Region IX, San Francisco

Mr. Bill Mace, City of Burbank Water Supply Department

Ms. Patricia O' Toole, Legal Counsel

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Telephone Message from Alex Lapostol, RWQCB April 8, 2005, 12:28 p.m.

Hello, Pat. It's Alex Lapostol at the Water Board. That letter is a "no further action" letter for heavy metals, so it's kind of all-inclusive. We stopped calling it the chromium investigation last year because there were too many problems with that. But, no, it's total heavy metals closure. Arsenic came up only because, as I mentioned there, it's over the PRG. You know, the PRG is ridiculously low. The entire state of California is over the PRG. But. . And it doesn't talk about chromium because there's not really much to say. But if you read, I think, the last third or fourth paragraph, no further requirements regarding this agency's heavy metals investigation. So that's what it is. Call me back if you've got any questions. Thank you. Bye.